THE UNIVERSITY OF ALBERTA

MOTIVATIONAL ORIENTATIONS OF SENIOR ADULTS

by

Glen R. Ellingson

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA

Spring, 1989

National Library of Canada
Bibliothèque nationale du Canada

Canadian Theses Service
Service des thèses canadiennes

Ottawa, Canada
K1A 0N4

The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to interested persons.

L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelque forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.

The author retains ownership of the copyright in his/her thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without his/her permission.

L'auteur conserve la propriété du droit d'auteur qui protège sa thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

ISBN 0-315-52886-9

Canada

THE UNIVERSITY OF BRITISH COLUMBIA

Adult Education
Department of Administrative,
Adult and Higher Education
5760 Toronto Road
Vancouver, B.C. Canada V6T 1L2

Telephone (604) 228-5881

April 19, 1989

Dr. Abe Konrad
Faculty of Education
633 Education South
University of Alberta
Edmonton, Alberta T6G 2G5

Dear Abe,

With reference to Ellingson's thesis please consider this to be permission for him to reproduce the factor loading table from Boshier and Collins (1982).

With reference to the E.P.S. itself, permission for reproduction is not normally granted but seeing as we are operating on a grandfather clause for this one he can reproduce it in the thesis but this should not be construed by others as constituting permission for reproduction.

Yours,

Roger Boshier,
Professor of Adult Education.

RB/jy

THE UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR Glen R. Ellingson

TITLE OF THESIS MOTIVATIONAL ORIENTATIONS OF SENIOR ADULTS

DEGREE FOR WHICH THESIS WAS PRESENTED MASTER OF EDUCATION

YEAR THIS DEGREE GRANTED 1989

Permission is hereby granted to THE UNIVERSITY OF ALBERTA LIBRARY to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

(Signed) Glen R. Ellingson

PERMANENT ADDRESS:

2432 - 81 Street

EDMONTON, Alberta

T6K 2Y4

DATED April 24, 1989

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled THE MOTIVATIONAL ORIENTATIONS OF SENIOR ADULTS submitted by Glen R. Ellingson in partial fulfilment of the requirements for the degree of Master of Education.

.....
Supervisor

.....James M. Small.....

.....Paula A. Brook.....

Date April 24, 1989

ABSTRACT

The purpose of this study was to determine the motivational orientations of senior adults participating in postsecondary credit courses and to examine the influence of demographic and educational characteristics upon those orientations.

The literature reviewed was related to the demographic and educational characteristics of senior adults, theory of motivational orientations and the development of the Education Participation Scale.

Data were collected from a sample group (N=224) of senior adults by means of a two-part questionnaire, which consisted of the Adult Student Demographics and the Education Participation Scale.

Data were processed using the Statistical Package for the Social Sciences (Nie et al., 1975). The following analyses were used in this study: frequency and percentage distributions were obtained to describe responses to the items on the Adult Student Demographics; factor analysis and orthogonal rotation resulted in the identification of six motivational orientation factors; t-tests and one-way analysis of variance were used to determine statistically significant mean differences between demographic and educational variables and the six factors derived from the Education Participation Scale.

Analysis of the demographic and educational data yielded a profile of a typical senior adult as: a younger (age 57), well-educated, self-determined mother of three,

enrolled in Arts courses, born in Canada, from a moderately affluent family, and familiar with adversity during youth.

Senior adults were found to be divided into two distinct groups when data analysis related selected demographic and educational variables to the six motivational orientations. Younger seniors were identified with the orientations of social contact, professional advancement, social stimulation and external expectations, whereas older seniors were identified with the orientations of community service and cognitive interest. The study yielded implications for educational programs for senior adults.

ACKNOWLEDGEMENTS

I wish to express my sincere thanks to Dr. A. G. Konrad, study supervisor, for his guidance, support and understanding during the various stages of the preparation of this thesis.

Appreciation is also expressed to committee members Dr. Paula A. Brook and Dr. James M. Small for their interest in and contributions to the thesis.

Special thanks is extended to my dear wife Lorraine, for her untiring efforts in proofreading and typing the manuscript.

TABLE OF CONTENTS

Chapter		Page
I.	INTRODUCTION	1
	Statement of the Problem	1
	Subproblems	2
	Significance of the Study	2
	Definition of Terms	3
	Assumptions, Delimitations and Limitations.	4
	Assumptions	4
	Delimitations	4
	Limitations	5
	Organization of the Thesis	6
II.	REVIEW OF LITERATURE AND RESEARCH	7
	Educational Participation	7
	Demographic Indicators.	9
	Educational Indicators of Participation	14
	Theories of Motivation.	20
	Psychological Theories of Motivation	20
	Psychosocial Theories of Motivation	21
	Miller's Force Field Analysis	24
	Expectancy-Valence Paradigm	25
	Roger Boshier's Congruence Model	26
	Life Transitions	28
	Chain of Response Model	28
	Motivational Orientations of Adult Learners	33

Motivational Orientation Research. . . . 33
Factor Analytic Studies 36
Studies Using Education Participation Scale. 38
Summary 42
III. INSTRUMENTATION AND METHODOLOGY 43
Instrumentation 43
Methodology 46
Data Analysis 47
Summary 49
IV. ANALYSIS OF DATA AND DISCUSSION OF THE FINDINGS. 50
Subproblem 1 50
Demographics 50
Socioeconomic 52
Crisis experiences 52
Comments on crisis experiences 52
Subproblem 2 56
Educational experiences. 56
Educational aspirations. 58
Educational influences 61
Comments on educational influences . . 61
Further Comments 63
Subproblem 3 65
Description of Factors 66
Motivational Orientation Factors . . . 67

Subproblem 4 70
Summary 72
V. SUMMARY, CONCLUSIONS AND IMPLICATIONS . . . 73
Summary 73
Purpose 73
Subproblems 73
Methodology 74
Data Analyses 74
Findings 75
Background Characteristics 75
Educational Experiences and Aspirations. 76
Motivational Orientations 76
Relationships 77
Conclusions 78
Discussion of Conclusions 80
Summary of Discussion. 90
Implications 91
Implications for Education 91
Implications for Further Research . . 92
REFERENCES 95
APPENDICES 105
A. Map of Metropolitan Edmonton 105
B. Adult Student Demographics and Education Participation Scale. . . 107
C. Letters of Permission 117

D. Covering Letters and Request Form . . 121
E. Education Participation Scale
Factor Structure. 125

LIST OF TABLES

Table		Page
3.1	Distribution and Return of Questionnaire . .	48
4.1	Demographic Characteristics of Senior Adults	51
4.2	Socioeconomic Characteristics of Senior Adults.	53
4.3	Crisis Experiences of Senior Adults	54
4.4	Educational Experiences of Senior Adults . .	57
4.5	Educational Aspirations of Senior Adults . .	59
4.6	1984 Course Enrollment of Senior Adults . .	60
4.7	Factors that Influenced the Participation of Senior Adults	62
4.8	Further Comments of Senior Adults	64
4.9	Education Participation Scale Factor Structure..	68
4.10	Relationship between A.S.D. Variables and E.P.S. Motivational Orientations.	71

LIST OF FIGURES

Figure		Page
2.1	Chain of Response Model	31

CHAPTER 1

Introduction

Participation of senior adults in adult education programs, though traditionally in small numbers, has begun to show signs of increase. Van Zandt et al. (1980) quoted surveys from 1971 which indicated a one percent involvement, whereas Fisher (1986:202) stated that: "Four percent of the population 55 years and above were actually engaged in adult education activities."

The University of Alberta Senate Task Force Report on Mature Students (1983:1) may have accounted for some of the increased growth in adult education participation by senior adults when it stated:

> It was recognized that social changes during the past 20 years, such as the rise in the median age of the North American population, the technological advances demanding retraining and continuing education, and the influences of the women's movement all have contributed to the influx of older students to the university campuses.

Despite this trend of increased enrollment, educators, according to Dellman-Jenkins and Papalia-Finlay (1983), know little about why senior adults are deciding to return to school. The fundamental question still remains, what are their motives for participation?

Statement of the Problem

The purpose of this study was to determine the motivational orientations of senior adults participating

in postsecondary credit courses and to examine the influence of demographic and educational characteristics upon those orientations.

Subproblems

1. What is the background of senior adults participating in postsecondary credit courses?
   (a) Demographic characteristics
   (b) Socioeconomic characteristics
   (c) Crisis experiences
2. What are the educational experiences and aspirations of senior adults?
3. What are the motivational orientations of senior adults as determined through use of the Education Participation Scale?
4. What relationships exist between selected personal variables of senior adults and their responses on the Education Participation Scale?

Significance of the Study

This study provided data which may be helpful to both institutions and students.

Institutions may be made aware of the demographic/educational characteristics of senior adults and how these relate to their motives for enrollment in postsecondary institutions.

According to Norris (1985), through becoming familiar with the motives of those who do attend, institutions will gain access to information necessary to change the

patterns of provision so as to attract those who do not attend. The size of the 55 year old and over cohort will rise sharply by 1996 according to Stone and Fletcher (1980). The increasing population of senior adults may serve as a substitute for the declining population of traditional students.

Students may benefit in being provided with more compatible programs and learning environments congruent with their needs, expectations and learning styles, according to Peters and Boshier (1976).

In addition, the study will add to the body of literature surrounding motivational orientation of adult learners in general and senior adult learners in particular. This is indicated as being in short supply according to Morstain and Smart (1977), Boshier (1979), Norris (1985) and Fisher (1986).

Definition of Terms

For the purposes of this study, the following definitions were used:

Senior adult. A senior adult is a person 55 years of age or older.

Socioeconomic characteristics include income and education level.

A.S.D. Adult Student Demographics is the survey instrument developed for this study to gather background and educational data on respondents.

E.P.S. Education Participation Scale is a scale developed by Roger Boshier (1971) to identify the motivational orientations of senior adults who participate in education courses.

Postsecondary education credit courses are courses of study offered for credit towards a certificate, diploma or degree.

Independent variables. In this study, the demographic and educational characteristics of respondents represent the independent variables.

Dependent variables. In this study, these are the six factors derived from the E.P.S.

Metropolitan Edmonton The greater Edmonton area as defined by the map in Appendix A.

Assumptions, Deliminations and Limitations

Assumptions

1. It was assumed that the respondents would be motivated to answer the questionnaires and under stand the intent of the questions.
2. It was assumed that the respondents were honest in their responses.

Delimitations

The subjects studied were:

1. Residents of the Metropolitan Edmonton area;
2. Age 55 or older;
3. Enrolled in one or more credit courses, in one or

more of the following postsecondary institutions: Alberta Vocational Centre, Athabasca University, Grant MacEwan Community College and University of Alberta; and

4. Enrolled in a credit course during the period from January 1, 1984 through December 31, 1984.

Limitations

This study was delimited to senior adults enrolled in credit programs in public postsecondary institutions only and, consequently, the results and conclusions drawn may not be applicable to other institutions.

Since the time period for including enrollment in the study was established as January 1, 1984, through December 31, 1984, data from Athabasca University did not conveniently fit this time frame. Students at Athabasca University may enroll and complete courses on personalized rather than institutional schedules. As a result, some senior adults may have been enrolled at Athabasca University prior to January 1, 1984, and continued as students throughout the period of study but not have been included in the sample population.

The Adult Student Demographics questionnaire was developed for this study, and although it was patterned after similar instruments and pilot testing was done, no reliability and validity tests were performed.

Organization of the Thesis

In this chapter a brief introduction, the purpose, assumptions, delimitations and limitations were presented. Terminology relevant to the study was defined and the significance of the problem was discussed.

In chapter 2 a review of related literature and research is presented in those areas related to the problem.

In chapter 3 the methodology used in conducting the study and the data analyses are described.

Chapter 4 is comprised of the data analysis and resultant findings.

In Chapter 5 the conclusions and recommendations of the study are presented.

CHAPTER 2

Review of Literature and Research

In this chapter, a review of selected literature relating to the motives for educational participation of adults in general and senior adults in particular is presented. The review is organized into several subtopics: educational participation; demographic indicators of participation; educational indicators of participation; theories of motivation to participate; and motivational orientation research.

Educational Participation

Seniors Involved in Educational Participation

Participation of senior adults in adult education overall, and in institutions of higher education more specifically, remains very low (Romaniuk and Romaniuk, 1982). Other researchers concurred with this observation:

> Only a relative handful of Americans are turning from the job market to the classroom . . . only 4.5 percent of those 55 to 66.5 years are enrolled in education programs (Sheppard, 1980:11).
>
> No more than two to three percent of adults 65 and over are enrolled in educational programs (Nidiffer, 1985:387).
>
> Only four percent of the population 55 years and above were actually engaged in (educational) activities (Fisher, 1986:202).

While participation of senior adults continues to be low, considerable changes are evident.

Increased Participation

Increased participation of adults has been reported for Australians by Evans (1984:21).

> Trends show that the older-age enrollments increased not only in absolute terms, but also as a percentage of the total population; from 1974-83 from 0.51 percent to 1.69 percent in the Colleges of Advanced Education. In the universities they rose from 0.96 percent to 2.77 percent.

Darkenwald and Merriam (1982:123) further illustrated this trend in reporting that participation by adults 55 years and older in the United States has grown rapidly, climbing by 55 percent between 1969 and 1975. The population of older people during the same time, however, increased by only 11.5 percent.

Increased participation may be accounted for by factors s' h as increased life expectancy and early retirement.

Commenting on longevity, Sheppard (1980) said that life expectancy has increased since 1940 when 7 percent were 65 and over; in 1980 there were 11 percent and by 2030, 20 percent are projected to make up this cohort. Fisher (1986:202) agreed, "The number of older adults, as well as their proportion of the population, will continue to increase." This perspective was also supported by Hewes (1983) and McKinnon (1983).

Sheppard (1980) said that while adults are living longer, they are retiring earlier. Jacobs (1970:386)

stated, "Early retirement results in more free time; one possible way to use this increased free time is education."

Demographic Indicators of Participation

Seniors are a very diverse group, demonstrating a wide variety of personal traits and experiences. According to Fisher (1986), as people become members of this older adult group, many will experience personal changes such as modification in family structure, location, economic status, use of discretionary time and societal role.

From a general overview of this cohort, according to Crimmins and Riddler (1985), a typical participant tends to be female rather than male, part time rather than full time, employed rather than unemployed, and married rather than unmarried. In establishing a profile of who participates and why they do so, Buttedahl and Verner (1965) proposed that age, gender, educational level, marital status, occupational status and social status are among the principal characteristics which have been found to differentiate among groups of participants in adult educational activities.

Age

Crimmins and Riddler (1985) concluded that both interest and participation in education begin a gradual decline in the early thirties through the forties and

and exhibit a sharp drop for persons 55 and over. Similarly, Flinck (1977), commenting on the situation in Sweden, observed that a number of studies have shown that the interest to participate in adult education decreases in increasing age. Marcus (1978), however, observed that some older respondents appear to be intensely involved in education, suggesting that the findings indicated a focusing upon growth. Growth, according to Darkenwald and Merriam (1982), is an outcome of accumulated experience, whereby a mature adult, having met lower level personal needs, may achieve a higher level of self-actualization according to Maslowian theory.

Gender

Research studies have shown an over-representation of women in the over 55 age group (Flinck, 1977; Crimmins and Riddler, 1985; Evans, 1984; Vinegrad, 1980).

The enrollment of adult women, according to Reehling (1980), has grown at an even higher percentage rate than for all students over 25 years. That the number of women has grown more rapidly than men is a natural outgrowth of changing attitudes toward gender roles and the emerging social and economic realities of the times.

Research results from Britain, according to Ryan (1985), indicate a different distribution among British Open University students, however. Nationally there are more women than men in the 60 to 64 age range and three

times as many women over 80, but women make up less than half of the students over 60. This may be a phenomenon of the distance education mode of delivery, but it requires further study.

Income

Most surveys have indicated that higher income is linked to higher participation in education (Crimmins and Riddler, 1985; Merriam and Mullins, 1981; Flinck, 1977). Hausafus (1985) indicated that the profile of respondents suggested that they could best be described as an advantaged elderly. Regarding elderly students of British Open University, Jones (1980) stated that applicants are increasingly coming from the wealthier geographical areas of Britain.

There is some evidence for disagreement about the effects of income on adult participation, according to Brady (1984:33):

> Closer analysis of the relationship between self-reported growth and annual income in this research sample revealed that the lower income and not the higher income individual perceived the greatest benefit from Elderhostel. When income was divided at the $20,000 level, persons below this level scored higher on 80 percent of the self-reported items. When divided at the $12,000 level lower income persons scored higher on all of the individual scales.

Perhaps these results in this study were influenced also by the nature of the educational program.

Marital Status

Battersby (1982b) observed that the elderly who are married are more likely to be involved in educational programs. Similar conclusions were reached by Hooper and March (1978:328):

> A much larger proportion of student elders than non-student elders are married, and smaller proportions are widowed or single. The fact suggests the possibility that older people who have intimate personal relationships are more likely to attend university classes, perhaps due in part to the support and encouragement of the spouse.

Findings reported by Crimmins and Riddler (1985), however, suggest the opposite, revealing a wide range of enrollment differences among college women. Enrollment rates increased 93 percent among unmarried women, and only 32 percent among married women over an eight-year period (1974-82).

Marital status was identified as a significant variable in the case of men but not women by Vinegrad (1980). This finding was corroborated by Brady (1984) who observed that 85 percent of men reported being married as compared with only 45 percent of the women and that only nine percent of the men were widowed as compared to 37 percent of the women; while eight percent of the total sample was single, almost all of these (94 percent) were women.

Life Changes

Changes in life status has a sizeable impact upon educational participation Knox and Videbeck (1963:106) stated:

> Several critical periods in human life, all affecting the individual, occur in connection with important changes in the individuals; social situation such as marriage, becoming a grandparent, loss of spouse or job. These events seem to affect the motivational pattern of the individual.

Similar observations were made by Darkenwald and Merriam (1982).

Crimmins and Riddler (1985) observed that an interest in career transition is the primary reason most adults give for being involved in higher education. Crimmins also concluded that career transition surpasses change in marital status as a predictor of participation.

Flinck (1977) reported a study by Johnstone (1964) which suggested the impact of parenthood appeared to have quite an opposite effect on the educational behavior of husbands and wives. The rates of educational participation for mothers were lower than for non-mothers, but among men they were higher among fathers.

Another life change encountered by senior adults, retirement, may provide well-educated individuals with the opportunity for increaseed educational participation. This, according to Covey (1983b:105), is

"simply a continuation of an already established lifetime educational activity."

Ethnic Background

Devereaux (1985) reported that place of birth could be better judged as a factor relating to participation when the rate was tied to the current age of the individual and the date of arrival in Canada. Covey (1983b), when dealing with the lifestage theory, however, claimed great variations in participation among different ethnic groups within the same life stages. Ethnic factors may undermine the life stages and corresponding educational participation.

Educational Indicators of Participation

Educational Attainment

Educational attainment is probably a better index to the interest, motivation and participation of adult learners than any other single characteristic (Brady, 1984; Crimmins and Riddler, 1985; Hausafus et al. 1985). Fisher (1986:203) summarized this position:

> Brunner et al. (1959) concluded that formal schooling appears to be the most significant determiner of participation in all forms of adult education. These findings were confirmed by Booth (1961) and London et al. (1963) and by Johnstone and Rivera (1965).

Covey (1983b) considered the continuity theory as an accurate explanation of senior involvement in education. Various others have commented on the importance of educational attainment.

Murphy (1982) stated that education itself seems to be addictive and, as a result, initial stimulation through required learning may lead to later voluntary studies. The outcome is that those who have already acquired significant education strive for more, while the least educated in society are the least likely to participate. Similarly, Hooper and March (1978:328) stated: "University education begets education." Rebok (1981) found that older students have had more frequent contact than older non-students with university education in their youth.

Flinck (1977) reported that the more years spent in school, the higher the probability of adult participation. Others have concurred with this finding (Brunner et al., 1959; Farnum, 1960; Dowling, 1963; Johnstone, 1964). Battersby (1982b:25) summarized, "The elderly who are already well educated will probably seek further educational pursuits."

Ryan (1985:243) reporting on a British Open University study of senior students, indicated findings which in part conflicted with those previously reported:

> Eight percent of the over 60 years old (B.O.U. undergraduates) had a degree (double that in the general population); however, nearly half the older students held qualifications less than those normally required for university entrance and 18 percent had no formal education qualifications at all.

Flinck (1977:42) also revealed inconsistencies in the effect of educational attainment when he cited Douglah

and Moss (1968) as reporting that despite a strong relation between educational level and participation, the education level, per se, does not suffice to explain the participation:

> In the low education level, participation in adult education seems to be influenced by a set of positional and psychological factors which have no apparent influence on the participation of persons with a high level of education.

Previous Educational Experience

Brady (1984) indicated mixed evidence on the relationship between previous educational experience and outcomes. Knox (1977:429) explained:

> Previous educational background can both facilitate and inhibit adult learning. If the earlier experience is characterized by low achievement and feelings of failure, the likely results are reduced accumulated knowledge, learning skills, persistence in schools, self-confidence, and participation and interest in further educational activity.

Jones (1980), reporting on studies regarding school experience in youth, indicated recovery approaches varied a great deal. Some suggested that those damaged by the school process can have their interest recovered.

Johnstone and Rivera also noted, in their landmark report of 1965, the important influence of prior educational experience and participation by adults.

The University of Alberta Senate (1983) reported that of mature adults entering as unclassified students, one-third of them indicated they had previously taken university extension courses.

Influence of Significant Others

Hooper and March (1978:327) reported on the influence of previous university education on participation.

> 92.8 percent of senior repondents either had university education in their youth or reported that one or more of their significant others (family members, spouse, parents, siblings, children or grandchildren) had attended university classes. 33.8 percent of this sample reported that one or both of their parents had university level education. Of the 30 persons (of 130 in the group) with only high school education or less themselves, only 10 reported no familial significant others had university experience.

Hooper et al. (1978) concluded that the data strongly suggested that personal contact, at some level, with the university in youth, renders the institution subjectively available to the individual in later life.

Flinck (1977) reported on studies by Dickinson (1971), observing that educational levels of the parent are related to the student's participation in adult education. Also, Dickinson (1971) and Essert and Spence (1968) indicated that a higher educational level of other members of the family was associated with greater participation of the male household heads in educational activities. Flinck (1977) also observed that wives of participants have had more schooling than wives of non-participants.

Employment Indicators of Participation

Crimmins and Riddler (1985) reported that three-quarters of the people over 35 who attended

college were also in the labour force. Enrollment rates among the employed segment of the population are two to three times as high as rates for those not in the labor force.

The type of employment involved in had a bearing on participation. Flinck (1977) found that white collar jobs were over-represented in practically all situations involving adult students. Within the blue collar group, craftsmen and foreman were over-represented, while unskilled and agricultural workers were under-represented. These findings were similar to those of Farnum (1960), Dowling(1963), Knox and Sjogren (1964) and Luckham (1971).

Ryan (1985) found that among the over-sixty retirees involved in courses, 32 percent had been in professional occupations; 10 percent were teachers; only three percent of the men were unskilled manual workers; a third of the women classified themselves houswives.

Premature Termination of Education

Adversity may serve as an incentive to pursue education. Ryan (1985:243) illustrated the truth of the statement with reference to British Open University students:

> Most of the students (over 60) were born in the early 20's so were in their late teens or early 20's during World War II. It is not surprising that half of the men claimed that their education had been interrupted by the war or national service . . . but the striking fact about them is that the great majority of them nevertheless managed to continue pursuing educational opportunities by

> means of evening, correspondence, and eventually B.O.U. classes.

Glanz and Tabory (1985:103) concurred by stating:

> Many of these old-new students were unable to obtain formal education beyond an elementary or high school level as a result of the historical factors that shaped their lives.

Vinegrad (1980) suggested that another feature of the educational history of individuals is reflected in the length of the gap between leaving school and commencing some form of higher education. As a result of sundered opportunities, such as early education cut-off, according to Courtney (1981), a feeling of incompleteness may develop. Flinck (1977:59) featured this incompleteness as an educational need:

> Educational needs are seen as the discrepancy between what an individual wants himself to be (the level of aspiration) and what he is. The more exactly an individual is able to identify his aspirations and evaluate his actual level of competence in relation to his aspirations, the more motivated he will be to study.

Havighurst (1970) suggested that events such as forced retirement could result in the substitution of educational participation for work, and contacts through education for family or friends lost through death. Other "triggering events" which may stimulate the motive to participation in education, according to Murphy (1982), include such transitions as a family member's death, divorce, retirement, etc.

Theories of Motivation

Reasons for participation in learning may be understood by a variety of psychological and sociological theories of motivation (Neugarten, 1977).

Psychological Theories of Motivation

Abraham Maslow (1954) offered a theory of Hierarchy of Needs. Maslow noted that the basic drives of human existence relate to the satisfaction first of physiological needs, and then safety and security needs. Next in the hierarchy are the social needs of love and affection; then self-evaluation, self-respect and self-esteem. At the apex of the hierarchy stands self-actualization, the need to maximize one's potential.

According to Maslow (1967), self-actualization does not occur in young people, because of their lack of experience in life. This theory gave substance to the needs of adult learners and the roles they played in the motivation of adults to participate in learning experiences. Maslow's theory has had a wide influence on psychological theory.

Malcolm Knowles (1973:82) considered Maslow's hierarchy of needs as "growth needs" which are fundamental for learning since "education is by definition growth in knowledge, understanding, skills, attitudes, interest and appreciation." Knowles' (1973) description of "educational" needs is something a person

ought to learn for his own good, for the good of the organization or for the good of society. It is the gap between a present level of competencies and a higher level required for effective performance as defined by the individual, his organization or the society. "An educational need, therefore, is the discrepancy between what an individual wants himself to be and what he is; the distance between aspiration and reality" (Knowles 1973:85).

Kurt Lewin (1947) described the complex human system as consisting of energy, tension and need; the values of tensions, energies and needs he described as "valences." He assumed that in any situation there are both driving (positive) forces and restraining (negative) forces which influence any change that may occur. Marcus (1978:297) interpreted Lewin as having "conceived of a need as the equivalent of a system of tension and a goal as a force field . . . where all forces point toward the same reason."

Psychosocial Theories of Motivation

Critics of the psychological theories of motivation charge that working toward self-actualization develops preoccupation with self. What is needed is a view of the individual within a social framework (Darkenwald & Merriam, 1982). Considered in a learning context, individual growth is to some extent a function of interaction with others. Neugarten (1968) claimed that

the existence of regularities of change through the life cycle have biological, social and psychological dimensions.

Covey (1983b:104) considered the continuity theory as an accurate explanation of senior involvement in education:

> Continuity theory easily accounts for older people's participation in higher education. Continuity theorists would argue that such participation by older people is a form of adaptation and an expression of the variety of responses available. The theory also suggests that those most likely to be in education will have established educational roles and patterns of behavior earlier in life.

Van Zandt and Peterson (1980:25) postulated a continuity theory, whereby "persons become more like themselves as they age." Those persons who were active and involved as younger persons tend to remain active and involved in their later years. Those who develop a habit of noninvolvement remain the same all their lives.

Such a theory, according to Coombe and Battersby (1984), would help to explain the participation of the elderly in programs of education. Busse (1977) interpreted continuity theory to suggest that most people tend to maintain similar attitudes, levels of functions and activities relative to their age cohort despite overall age changes. Patterns of life established by early lifestyle, then, tend to influence maintenance of these patterns in later life.

Havighurst (1964) proposed developmental tasks as a way of looking at adult development. A developmental

task must be achieved at or about a certain phase in life, if a person is to judge himself as a competent person. Success prepares a person for successful performance of later tasks. According to Flinck (1977), a developmental task is determined by three forces: the forces of biological development, the forces of social demands and expectations and the forces of personal ambition and aspiration.

The disengagement theorists have expressed the belief that "Education is not something that helps (older) people maintain roles or re-engage in society, but rather serves to remove older people from roles" (Covey, 1983b:97). Busse (1977:97) interpreted disengagement theory as: "High satisfaction in old age is usually present in those individuals who accept the inevitability of reduction in social and personal interactions." Covey (1983b) suggested, in that context, that motives toward educational participation in older adults indicates unsuccessful aging.

These are but a few of the psychosocial theories that interpret the benefits of educational participation in senior adulthood. The interpretations are complementary in some comparisons and diametrically opposed in others.

A number of models have been developed in attempts to establish theories of motivation to participate in educational endeavours. These models draw upon the influence of established psychological and sociological

theories with the recognition that motivation for learning not only arises from within but from forces outside; from group relationships in our environment.

Miller's Force Field Analysis

Miller (1967) tackled the problem of explaining the relationship of S.E.S. (socioeconomic status) and educational participation. He used the needs hierarchy of Maslow (1954) and the force field analysis of Lewin (1947) to establish his theory of social class and to explain why there are differences between social classes in terms of their expectations of educational participation (Erickson, 1983).

Miller (1967) used the needs hierarchy to explain that people cannot be concerned about higher needs until their lower needs are met. The implication that this has on educational motives is that lower class members will be interested in education for meeting survival needs, such as for job training, while those of the upper classes, who have fulfilled their basic survival needs, will seek education that leads to achievement and self-actualization.

Miller (1967) used Maslow's (1954) needs hierarchy in helping to explain the relationship between educational interests and age and position in the life cycle. Early adult stages showed concern with satisfaction of lower hierarchial needs whereas individuals in later stages devoted more time working

towards achieving higher level needs. Miller (1967) used Lewin's (1947) concept of positive and negative forces (the forces of the societal environment) forming a resultant motivational force, along with Maslow's (1954) needs hierarchy, to explain why there are tendencies for variations in participation in education, from low to high in the respective lower to higher socioeconomic groups of society.

Expectancy-Valence Paradigm of Kjell Rubenson

Rubenson (1977), the Swedish educator, used the work of Lewin, Tolman, McClelland and Atkinson to arrive at a modification of Vroom's (1964) expectancy-valence model. He shifted attention to individually based measures from demographic variables and accommodated the strong influence of various subgroups (significant others) in shaping attitudes toward participation. The resulting strength of an individual's motivation is determined by combining positive and negative forces existing in the individual and his environment.

According to Erickson (1983), the expectancy part of Rubenson's theory consists of two components, the expectation of personal success within an educational activity and the expectation that being successful will have positive consequences for the learner. These forces are considered multiplicative. If either one assumed a zero value (if one does not see oneself as being capable of achieving the skills or knowledge

contained in a course or if one sees the acquired skills or knowledge as not being beneficial for oneself), one case will cancel out the other; i.e., the resultant motivational force will be zero. Expectancy alone will not lead to course enrollment unless there is a positive valence associated with anticipated outcomes.

Roger Boshier's Congruence Model

Boshier (1973) shared with Rubenson (1977) and Miller (1967) a belief that motivation for learning is a function of the interaction of internal psychological factors and external environmental factors (variables).

Boshier (1973) dervied from Maslow's (1954) motivational typology and factor analysis of "motives" for attendance, the notion that participants (in education) can be typed "deficiency" or "growth" motivated. He associated enrolling for "deficiency" reasons with intra-self incongruence, which in turn leads to self/other incongruence and dissatisfaction with the educational environment. Growth motivation, on the other hand, was associated with intra-self congruence and thus self/other congruence and satisfaction with the educational environment.

Closer interpretation of Maslow's (1954) theory suggests deficiency motivated people as being impelled by social and environmental pressures. They use works and educational activity "more for achieving gratification of lower basic needs, of neurotic needs as

a means to an end or as a response to cultural expectations" (Boshier, 1973:256). Growth motivation persons, continues Boshier (Ibid) "are characterized as inner-directed, autonomous, open to new experiences, willing to be spontaneous, creative and free from deterministic attitudes." This autonomy is accompanied by a relative independence from adverse external circumstances such as poor teaching and wishes, and plans are primary determiners rather than being stresses from the environment. These may be interpreted as aspirations. In the applying of his needs hierarchy theory, Maslow (1967:122) observed: The self-actualizing growth-motivated person is far less dependent, far less beholden, far more autonomous and self-directed and better equipped to cope with and adapt to environmental inconsistency and disorder."

Boshier's (1973) primary conclusion from his research was that both participation and dropout can be understood to occur as a function of the magnitude of the discrepancy between the participant's self-concept and key social aspects of the educational environment. Nonparticipants manifest self/institution incongruence and do not enroll. Boshier suggested that a number of incongruences (self/other, self/institute) are additive; the greater the sum, the greater the likelihood of nonparticipation or dropout. He asserted that dropping out is simply an extension of nonparticipation, and that low participation rates of adults in lower socioeconomic

classes is due to a lack of congruence between their lives and that of the middle class values of the educational environment. Boshier also contended that single social, psychological and institutional variables mediate congruence/dropout relationships, and age was among the most powerful mediating variables. Maslow, according to Boshier (1973), expected young people to be more deficiency motivated than older people. Growth replaces deficiency motivation as a person overcomes adolescent storms. This was also observed in other variables such as socioeconomic status by Johnstone and Rivera (1965).

Aslanian and Brickell on Life Transitions

Aslanian and Brickell (1980) developed the hypothesis that transitions such as jobs, marriage and retirement require adults to seek new learning. In a subsequent study they found that 83 percent of 744 adult learners interviewed named some transition in their lives as the motivating factor for further learning. Aslanian and Brickell noted that individuals not experiencing major transitions were more likely to learn on their own, while those in the midst of important life changes were more likely to seek out formal learning settings.

Chain of Response Model

K. Patricia Cross (1981) also relied heavily on the work of Miller (1967), Rubenson (1977) and Boshier

(1973). In her analysis of these three theorists she noted that they viewed participation as an interaction between an individual and his or her environment; all drew from the work of Lewin (1947) and force field analysis, in that participation was seen as the result of the individual's perception of positive and negative forces in any given situation.

Cross (1981) affirmed Rubenson's and Boshier's hypothesis that certain personality types will be more difficult to attract to education because of low levels of self esteem. And Miller's theory, containing an analysis of social class and participation, also places importance on the lack of achievement motivation as being a deterrent to lower levels of involvement of the lower socioeconomic classes.

The concepts of incongruence and dissonance were also used by all three investigators. Boshier (1973) referred to his work as a congruence model. Miller's (1967) primary concern was with the compatibility of the social classes with the values of the educational system. Rubenson's (1977) concepts of expectancy and valence assumed congruence between participation and the anticipated outcomes of learning. All three theorists adhered to the application of Maslow's needs hierarchy; they relied on the basic premise that higher order needs for security and safety have been met. Cross (1981:124) combined the work of the above theorists to form what she calls "the rough beginnings of a conceptual

framework designed to identify the relevant variables and hypothesize their inter-relationships."

The chain of response model (see Figure 2.1) assumes that "past participation in a learning activity is not a single act but the result of a chain of responses, each based on an evaluation of the position of the individual in his or her environment" (Cross 1981:115). Regarding point A in the model, self-evaluation, Cross points out that individuals who are oriented toward achievement, those with confidence in their abilities, are more likely to put themselves to the test of a new learning situation whereas those who lack confidence (deficiency oriented) will avoid this situation, which could threaten their self-esteem. In the chain of response model, self-evaluation is where the chain of responses leading to participation begins.

Point B depicts the attitude toward education. Those who hated school as children or recall negative experiences are less likely to place themselves in a competitive situation where they may not do well. Attitudes toward education, according to Cross, may be indirectly influenced through the attitudes of reference and membership groups or individuals (significant others).

The importance of goals and the expectation that goals will be met, Point C, relates to the work of Lewin (1947), Vroom (1964) and, more recently, Rubenson (1977). There are two components: valence, the

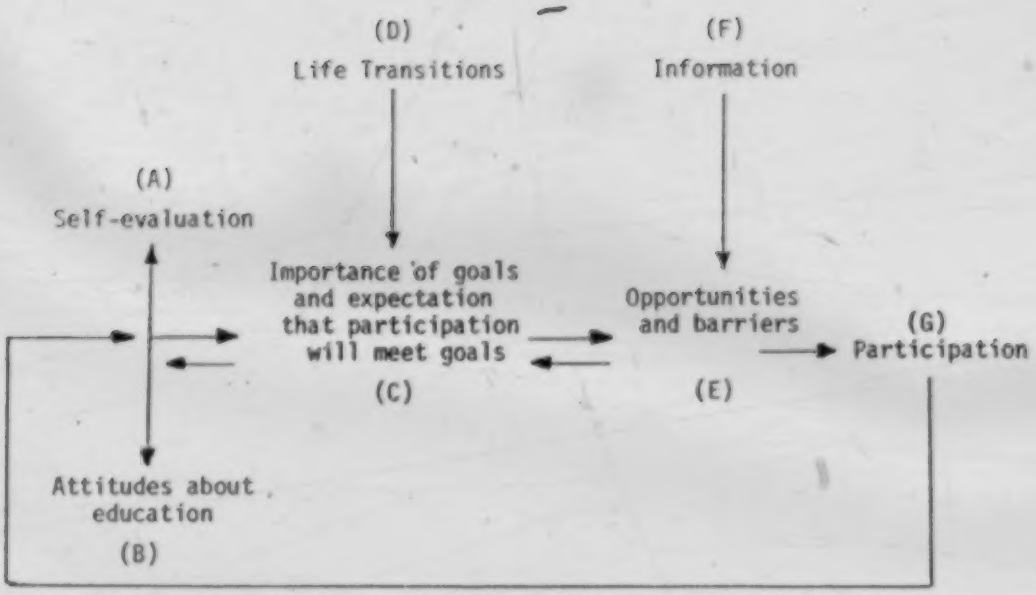


Figure 2.1

Chain-of-Response (COR) Model for Understanding Participation in Adult Learning Activities (Cross, 1981)

importance of the goal to the individual and expectancy, the individual's personal judgment that pursuit of the goal will be successful and lead to the desired goal. If a goal that is important to the individual can be achieved through further education, motivation at Point C is likely to be strong. If, however, the goal is unimportant or if success is questionable, motivation would correspondingly decrease.

Life transitions, Point D, presents the individual with a period of change calling for new adjustment. Here the work of Aslanian and Brickell (1980) as well as Havighurst (1970) identify the transitions of life as being positive forms for learning. These times, according to Cross (1981), depend on developmental tasks that are predictable associated with each phase of human development. Retirement, death of a spouse, divorce, etc., could provide a need for adaptation to new situations and hence provide stimulus (a need) for involvement in learning events.

Point E refers to barriers and special opportunities for adult learning. Cross (1981) suggests that if adults get to this point with a strong desire to participate, it is likely that the force of their participation will stimulate them to seek out special opportunities and to overcome modest barriers. Weakly motivated individuals, however, will find even small

barriers insurmountable, hence their participation will be thwarted.

Accurate information, Point F in the chain of response model, plays a critical role in that it is information that links the motivated learner to an appropriate opportunity. Without the availability of information, participation may be low or nonexistent if opportunities are not discovered or if barriers (Point E) are large.

Psychosocial models, as discussed above, have had the greatest collective influence on the evolution of instruments designed to measure the motivational orientations of adult learners; an examination of these follows.

Motivational Orientations of Adult Learners

Motivational Orientation Research

For over 50 years interest has been evidenced in the motivational orientation of adult education participants. In 1933, Hoy undertook an inquiry into interests and motives among adult evening students in Birmingham (Courtney, 1981). A variety of different techniques, useful in determining the individual's reasons for participation in educational projects, include interviews, questionnaires, open-ended sentences and checklists (Knowles, 1970). Problems are inherent in any method of data collection and though respondents may be very certain about what they wish to learn, they

may be less able to clearly establish why they wish to learn.

In an early exploration of motivation, Houle (1961), in a report on interviews conducted with 22 continuing learners, determined that all of them had goals for learning, though they differed individually in their reasons for participation. On the basis of their stated reasons he categorized these learners into three groups, namely, the goal-oriented (those in possession of a definite direction and purpose in their learning), the activity-oriented (those who enjoyed the learning experience apart from content or purpose), and the learning-oriented (those who sought knowledge for its own sake).

A national survey of adult learners conducted in the United States by the National Opinion Research Centre (Johnstone and Rivera, 1965), constitutes a comprehensive examination of the field of adult education in the early sixties, including attitudes and opinions held by adults concerning education. Johnstone and Rivera (1965:10) stated:

> The main things people remembered about how they first came to enroll, then, were preparation for new jobs,advancement in present jobs, relationships with other people and changes in the status or composition of their families.

It is interesting to note that age played a factor in respondents' motivation since job-centered reasons influenced younger adults towards participation while older adults enrolled for general knowledge. Years of

formal schooling related strongly to whether persons evidenced interest in further education. Those with more formal schooling were more likely to enroll.

Morstain and Smart (1977:667, 668) discussed the limitations of this research format where the dependent variable, reason for participation in adult education, is related to demographically constructed groups, e.g., age ranges. It was suggested that this approach limits the possible emergence of motivational patterns from a diverse group of adult learners.

Houle's (1961) three categories of learners, the goal oriented, the activity oriented and the learning oriented, constituted a typology of learning orientation subject to further investigation. At least three instruments have been designed by researchers towards this end: The Continuing Learning Orientation Index (Sheffield, 1964); the Education Participation Scale (Boshier, 1971), and The Reasons for Educational Participation (Burgess, 1971). Factor analytical techniques have been applied to data from studies using these instruments to isolate factors representative of motivation orientation in different populations. Boshier and Collins (1982) reported motivational orientation data from Cree Indians, Ghanian farmers, American nurses and Inuit trappers.

Factor Analytic Studies of Motivation Orientation

Sheffield (1964) prepared a 58 item questionnaire, the Continuing Learning Index, based on Houle's work, and used it in a study of 453 adult education participants in 20 continuing education conferences in the United States. From the analysis, Sheffield produced five factors which he termed orientations:

1. learning orientation - seeking knowledge for its own sake;
2. desire-activity orientation - taking part because in the circumstances of the learning an interpersonal or social meaning is found which has no necessary connection at all with the content or announced purpose of the activity;
3. personal goal orientation - participation in education to accomplish fairly clear-cut personal objectives;
4. Societal-goal orientation - participating in education to accomplish clear-cut social or community objectives; and
5. need-activity orientation - taking part because in the circumstances of learning an introspective or intrapersonal meaning is found which may have no necessary connection, and often no connection at all, with the context or announced purpose of the activity.

Boshier (1971), working in New Zealand, re-examined and refined the work of Houle and Sheffield (1964), and developed the Education Participation Scale (EPS) consisting of 48 items used to elicit from individuals their reasons for participating in adult education activities. Factor analysis yielded fourteen first-order motivational orientations; these were further condensed into seven second-order factors by analysis of first-order intercorrelations. A third-order factoring yielded four independent factors with similarity to Houle's (1961) three factor typology (Boshier, 1971:15).

Burgess (1971) developed the Reasons for Education Participation Scale for use in his study of the motivation of 1,046 adults in the St. Louis metropolitan area, learning on a part-time basis. Burgess hypothesized that reasons given by men and women for participating in educational activities would factor into a limited number of groups. Factor analysis identified seven factors as follows:

1. desire to know;
2. desire to reach a personal goal;
3. desire to reach a social goal;
4. desire to reach a religious goal;
5. desire to take part in social activity;
6. desire to escape; and
7. desire to meet formal requirements.

Boshier (1976), in his review of factor analytic studies of motivation, pointed out the potential error in comparing results of factor studies where different instruments are used to elicit motivational responses.

Studies Using the Education Participation Scale (E.P.S.)

Wishing to express Houle's (1961) typology further, Boshier (1971), developed the 48-item Education Participation Scale based on further examination of The Inquiring Mind and the highest loading items from Sheffield's study. The study produced four third-order factors (orientations):

1. other-directed advancement (possibly related to vocational or environmental influence);
2. learning development orientation (related to preparing oneself for future educational activity);
3. self vs. other-centredness; and
4. social contact (Boshier, 1971:19).

In developing a theory of motivation for participation in adult education, Boshier (1973) reviewed the field of psychology related to needs and the human tendency to seek and maintain homeostasis (congruence) both within the organism and between the organism and its environment, including the social system, such as the family and the community. Based on theories of adaptation and homeostasis, he suggested an early model as follows: deprivation (tension increase)

-- action (participation) -- satisfaction (tension decrease).

Psychologists (according to Goble, 1971) such as Maslow et al., suggested a model for adult education participation based on deficiency or "needs" orientation versus self-actualization or "growth" motivation for participation.

Boshier (1973) believed that refinement of the E.P.S. would allow clearer differentiation of factors and would facilitate consideration of demographic information in relation to the motivational factors identified. Pursuing the ideas of a psychological continuum for motivation, Boshier (1977:92) introduced the term life chance as a synonym for deficiency motivation and life space as a synonym for growth motivation.

> Growth or life-space oriented people participate in adult education for expression rather than in an attempt to cope with some aspect of their life. Life-chance oriented people participate because of the need to survive and acquire utilitarian knowledge, attitude or skills (Boshier, 1977:92).

Commenting on Haag's study (1976), involving 240 participants in Vancouver night classes, Boshier (1977:95) stated:

> The correlations appear to provide compelling evidence to support the notion that motivational orientations are related to psychological states which strongly resemble Maslow's description of deficiency and growth motivation.

The continuum postulated by Boshier is a psychological dimension which he believed is altered by a person's age

and accomplishment of his developmental tasks, thus the amount of motivation attributable to life-chance and life-space orientation changes over a lifetime.

In Boshier's 1977 study, the E.P.S. was administered to 242 participants in general non-credit adult education night classes in Richmond, British Columbia. A sub-sample of 76 subjects from the population of 242 provided demographic data to test hypotheses concerning relationships between mediating variables and motives for partipation. The E.P.S. data were subject to principal components analysis and then to a varimax orthogonal rotation to produce uncorrelated factors. The five factors extracted consisted of:

1. Escape/stimulation;
2. Professional Advancement;
3. Social Welfare;
4. External Expectations; and
5. Cognitive Interest.

Contained in the five factors were 41 out of 48 E.P.S. items, and these accounted for 42.1 percent of total variance. Taking into account the neuroticism and self-actualization scores in Haag's 1976 study, the five factors of the Boshier 1977 study were assigned to life-chance or life-space positions on the postulated psychological continuum as follows:

Escape/stimulation - Life-chance

Professional Advancement - Life-chance

Social Welfare - Life-space

External expectations - Life-chance

Cognitive Interest -- Life-space.

Five factor scores were developed for each of the 76 respondents in the sub-sample and correlated with social and demographic variables (age, occupational status, educational attainment, social participation and previous participation in adult education (Boshier, 1977:100).

Exact results of this study are difficult to identify in the report of the study (Boshier, 1977:89-115) since a number of demographic details were not reported. Boshier, however, maintained that life-space motivation is not a linear function of age, and as the individual passes through various developmental stages of adulthood he or she may move from life-chance orientation to life-space orientation and back to life-chance orientation depending on the individual's social and psychological status. Boshier (1977:112) concluded:

> Motivational orientations are more than just superficial clusters of reasons for enrollment. They seem to be surface manifestations of psychological states, which are in turn probably related to psychosocial conditions in varous age and socio-economic groups.

Morstain and Smart (1977) used the E.P.S. data scale scores of 648 respondents to construct groups. E.P.S. scale scores were calculated and plotted for each group created by the cluster analysis.

> After empirically verifying the membership of each typological group through discriminant analysis, an

> examination of E.P.S. and mean score profiles and selected demographic variables was undertaken to help characterize the distinguishing features of each adult learners group (Morstain and Smart, 1977:670).

Six groups were statistically supported by the results of the cluster analysis procedure. Next they examined selected demographic variables for members of each group: age, sex, educational attainment and family income. Although some differences in distribution of these variables across groups were discovered, none of them were uniquely descriptive for any given adult learner type.

Summary

This chapter presented a review of selected literature related to why adults in general and senior adults in particular participate in postsecondary credit courses. An examination of information relating to individual characteristics and personally experienced events deemed as influential in educational participation was undertaken; these included demographic, educational, employment and life experience indicators.

Theories of the psychological and psychosocial bases of motivation were examined. The development of instruments for measuring motivational orientations of educational participation was traced with a particular focus upon the specific features of the Education Participation Scale.

CHAPTER 3

Instrumentation and Methodology

The purpose of this study was to determine the motivational orientation of senior adults participating in postsecondary credit courses and to examine the influence of demographic and educational characteristics upon these orientations.

This chapter contains a description of the instruments used in this study and the methodology used to collect and analyze the data. A survey approach was utilized in this study.

Instrumentation

Data were collected using a questionnaire survey. According to McCallon and McCray (1975), questionnaires are relatively inexpensive and less time consuming than other research tools. Since the researcher is not present during the completion of the questionnaire, researcher bias is eliminated and anonymity is assured. Also, because the questionnaire offers the best opportunity for anonymity, the information elicited is most likely to be accurate.

The questionnaire for the study consisted of two parts: The Adult Student Demographics, consisting of 23 items, and the Education Participation Scale consisting of 40 items (Appendix B).

Adult Student Demographics

While this instrument was constructed for the present study, items 1 to 8, relating largely to personal and socioeconomic matters, were based on a questionnaire used in a previous study by Ingram, Konrad and Small (1979). Items 9 and 10 asked for personal judgment of early educational experience. Items 11 and 12 requested information regarding experiences in early youth which may have contributed to disruption of education. Items 13 to 18 related to courses taken prior to 1984 and to the aspirations of youth. Item 19 asked for personal judgment about the influence of "significant others" in motivating them to participate.

Items 20 to 22 related to institutional and course information during 1984. Item 23 encouraged respondents to comment further on any educational experiences deemed relative.

Data from the Adult Student Demographics questionnaire were collected to develop a descriptive profile of senior adults participating in credit programs in Edmonton, and to serve as independent variables in analyzing the motivational orientations of senior adults.

Pilot Study

To establish content and face validity, the Adult Student Demographics questionnaire was subjected to examination and comment by a class group of 24 graduate students of the Department of Educational Administration,

University of Alberta. They completed an earlier version of Adult Student Demographics and answered the questions from their parents' perspective. Responses received from the reviewers resulted in minor revisions of the questionnaire.

The pilot questionnaire was also reviewed by Dr. A. G. Konrad, the researcher's thesis advisor.

The Education Participation Scale

Boshier's (1971) Education Participation Scale, developed for his New Zealand study, contains 48 items designed to identify the motivational orientation of adults. A nine-point Likert-type scale (very much influence to very little influence) was used to check item response. Prior to the use of the E.P.S. in his 1971 study in New Zealand, Boshier (1971) subjected the 48-item scale to a six-week test/retest reliability and factoring study with 20 students in his university extension classes. Test/retest correlation coefficients for each of the 48 items reached statistical significance at the .001 level, confirming the reliability of all items.

Modification and validation of E.P.S. After the development of the E.P.S., other researchers used the 48-item scale and a modified version to test the motivational orientations of diverse groups of adults. Morstain and Smart (1974) used the 48-item E.P.S. scale in their study of 648 adults in Delaware. Haag (1976) studied 240 night class participants in Vancouver, B.C.,

using a 40-item, modified version of E.P.S. This modified version was formed by deleting eight "passenger" items which had failed to load clearly on any factor in previous studies, and a four-point response scale was introduced.

The modified scale was also used by Mills (1979), in a study of nurses involved in part-time study, and Dellman-Jenkins (1983) to determine the significance of motivations which influenced senior adults to pursue postsecondary credit courses.

Further support for the reliability and validity of E.P.S. as an instrument to test motivational orientations of adults in general is sizeable. Boshier has established a master file of results on the use of E.P.S. from 1969 to 1981. To that date, 48 files had been established consisting of 12,191 cases. Most of the data were obtained from groups in the U.S.A. and Canada, but some files came from Ghana, Singapore, Malaysia and Hong Kong.

Methodology

The Sample

This study examined the motivational orientations of all senior adults (55 years of age and older) who during 1984 were enrolled in the study of credit courses in four Edmonton and area postsecondary institutions. Permission and assistance in distributing questionnaires was sought from the registrars of the University of Alberta, Athabasca University, Alberta Vocational Centre, Grant MacEwan Community College and Northern Alberta Institute

of Technology (See Appendix C for letters of permission. Northern Alberta Institute of Technology was unable to participate since its computer records of students were not accessible by age specification.)

The two-part questionnaire (Adult Student Demographics and Education Participation Scale) was sent by mail to 237 students in four public postsecondary institutions serving senior adults residing in the metropolitan Edmonton area (See map in Appendix A). Each questionnaire was accompanied by a letter of introduction and explanation, a stamped self-addressed envelope for the return of the completed questionnaire and a self-addressed postcard for request of results of the study findings. Copies of all correspondence are located in Appendix D.

After deletion of respondents from Newman Seminary or "no institution" (7), 24-year-old (1) and undelivered (5), there were 136 usable returns out of 224 sets of questionnaires assumed delivered; a 60.7 percent response (see Table 3.1). This group of senior adults was a non-random sample as described by Treece and Treece (1977:104), a quota or purposive sample based on the belief that it is representative of the total population available to be studied. The sample appears to over-represent the university sector in this study.

Data Analysis

The data obtained from the usable questionnaires were transferred to computer files for data processing using

Table 3.1

Distribution and Return of Questionnaires

Public Postsecondary Institution	Questionnaires Distribution N	Return N	Return Percent
University of Alberta	160	103	64.4
Athabasca University	12	11	91.7
Grant MacEwan Community College	46	20	43.5
Alberta Vocational Centre	19	2	10.5
Less unidentified and undelivered	13		
Total sample	224	136	60.7

the Statistical Package for the Social Services (Nie, Hull et al., 1975:190-197). Frequency and percentage distributions were initially obtained to describe responses to the items on the Adult Student Demographics, coded V_1 to V_{59}, and Education Participation Scale, coded E_1 to E_{40}.

Data from the 40-item E.P.S. were subjected to factor analysis. T and F tests were used to determine statistically significant mean differences between and among the Edmonton area seniors on the basis of personal and educational characteristics and the six identified factors derived from the E.P.S.

Open-ended responses were subjected to content analysis and summarized.

Summary

The data for this study were collected through the use of a two-part questionnaire. Questions concerning personal and educational characteristics were included in the Adult Student Demographics. Questions focusing on specific personal reasons for participation in educational courses were included in the 40-item Education Participation Scale.

Data were analyzed to provide frequency distributions, means, factor analysis, t-tests and one-way analysis of variance to examine the motivational orientation of adults.

CHAPTER 4

Analysis of Data and Discussion of the Findings

This chapter contains a presentation of the data analysis and a discussion of the findings with regard to the four subproblems of the study.

1. What is the background of senior adults participating in postsecondary credit courses?

Demographics. The frequency distribution of responses of senior adults participating in postsecondary credit courses to questions about the characteristics of gender, age, marital status, number of children, number of children enrolled in postsecondary education, and country of birth is shown in Table 4.1. The major findings corresponding to Questions 1 to 6 on the Adult Student Demographics were as follows:

1. A majority of the senior adults were female (62.9 percent).
2. The largest percentage of the senior adults were between 55 to 59 years of age (60.3 percent).
3. Two-thirds of the senior adults were married (65.7 percent).
4. Two-fifths of the senior adults had 4 or more children.
5. Of the senior adults who had children, 47 percent had 3 to 7 children who were, or had been, enrolled in postsecondary education.
6. Over two-thirds (69.2 percent) of the senior adults were born in Canada.

Table 4.1

Demographic Characteristics of Senior Adults

Data		Frequency	Percent
Gender	F	90	62.9
	M	53	37.1
Age	55-59	85	60.3
	60-64	24	17.0
	65 and over	32	22.7
Marital	M	94	65.7
	S	48	34.3
Number of children			
	None to 3	78	58.2
	4 and over	56	41.8
Children in postsecondary			
	0-2	64	53.3
	3-7	56	46.7
Country of birth			
	Canada	99	69.2
	Other	43	30.8
Age at immigration			
	0-18	6	17.1
	19-29	12	34.3
	30-39	9	25.7
	40+	8	22.9

7. About half (51.4 percent) of those who were foreign-born came to Canada prior to their 30th birthday.

Socioeconomic. The frequency distribution of the responses of senior adults regarding income levels and formal education attainment is shown in Table 4.2. The major findings corresponding to questions 7 and 8 on the Adult Student Demographics were as follows:

1. About half (51.5 percent) of the senior adults had completed the requirements for an undergraduate degree or postgraduate degree.
2. About two-fifths (41.9 percent) of the senior adults had family incomes which were $40,000 per annum or greater.

Crisis experiences. The frequency distribution of the responses of senior adults regarding "major life adversities" is found in Table 4.3. The respondents indicated that economic depression (53.1 percent) and war (46.9 percent) were commonly experienced in their lives. A fairly large number of respondents (37.7 percent) also experienced premature termination of their education.

Comments on crisis experiences. Respondents were invited to comment on what they judged to be "major life adversities" during childhood or youth and on the circumstances surrounding their need to prematurely terminate their education during youth.

Economic depression was cited much more often than any other adversity. The shortage of funds restricted the

Table 4.2

Socioeconomic Characteristics of Senior Adults

Characteristics	Frequency	Percent
Highest level of formal education		
University degree	71	51.5
Post high school	37	26.8
Elementary to high school	30	21.7
Annual family income		
$40,000 and up	57	41.9
$20,000 to $39,999	45	33.1
Up to $19,999	34	25.0

Table 4.3

Crisis Experiences of Senior Adults

Crises	Frequency	Percent*
Economic depression	76	53.1
War	67	46.9
Premature termination of education	52	37.7
Curtailment of education/work	39	27.3
Death in the family	37	25.9
Separation from family	19	13.3

* Respondents circled all experiences that applied; many selected more than one experience.

type and duration of education. Some chose business college, teacher training or nursing because of the shorter training period required or for the reduced cost because of the practical nature of the training. As one individual stated, "If grants, loans or scholarships had been available in 1935, I would have gone to university."

War had an impact upon both Canadian and foreign-born individuals. Some respondents dropped out of school to go to war; others because an older family member had gone to war and they needed to fill the gap in assisting the family on the farm or to aid in various civilian war efforts.

Respondents identified a variety of factors relating to premature termination of education or to curtailment of their education to seek work. Financial restrictions were frequently cited. A typical comment reflecting the circumstances of many was, "I could not continue school so I went to business college so I could get a job and keep myself." It was not uncommon for those as young as 12 years of age to leave school to help in the home, to assist on the farm, or to take up apprenticeship training.

Death in the family, illness of a family member, or personal illness resulted in leaving school prematurely or separation from the family. One respondent wrote, "Father developed an incurable kidney disease at age 37; he died at 43. Mother remarried and I left home, because of disagreement with my stepfather when I was 15."

Family-related problems revealed conflict with parents or siblings which resulted in people leaving home and hence prematurely terminating or delaying their education. Also, prevalent attitudes of a sexist nature frequently interfered with educational choices, particularly of women. Higher education was not deemed necessary for girls. One respondent reported this home attitude: "Girls shouldn't go to university, they are intended to be housewives."

2. What are the educational experiences of senior adults?

Educational experiences. The frequency distribution of senior adults regarding their educational experiences is found in Table 4.4. The findings indicate that 72 percent found childhood school experiences exciting or satisfying. During youth, school experiences were considered exciting or satisfying by three-fourths of the respondents.

Prior to December 31, 1983, senior adults participated in credit courses in general academic/business/professional and technical/vocational. Three-fifths of the respondents enrolled in general academic courses, with a median number of four courses. Business/professional courses accounted for one-third of the enrollment and technical/vocational less than one-seventh. Nearly three-quarters (71 percent) of the respondents considered the credit courses taken prior to

Table 4.4

Educational Experiences of Senior Adults

Educational Experiences	Frequency	Percent
Childhood school experiences		
Exciting/satisfying	102	72.3
Non-controversial	24	17.0
Boring/unpleasant	15	10.6
Youth school experiences		
Exciting/satisfying	101	73.7
Non-controversial	20	14.6
Boring/unpleasant	16	11.7
Credit courses		
General academic	85	54.8
Business/professional	48	31.0
Technical/vocational	22	14.2
Influence of credit courses		
Much influence	75	71.4
Little influence	30	28.6
Non-credit courses		
General academic	33	32.1
Business/professional	40	38.8
Technical/vocational	30	29.1
Influence of non-credit courses		
Much influence	36	52.2
Little influence	33	47.8
Institution of enrollment		
U of A	103	75.7
Other	33	24.3
Student status		
Full time	41	32.0
Part time	87	68.0

1984 to have had much influence on their decision to enroll in the 1984 credit programs.

Prior to December 31, 1983, 76 percent of the respondents had participated in non-credit courses in general academics, business/professional and technical/vocational. The largest number (39 percent), were enrolled in business/professional courses. Slightly over one-half (52.2 percent) of the respondents claimed that enrollment in non-credit courses had much influence on their decision to enroll in the 1984 credit programs.

During the 1984 academic year, over three-quarters (75.7 percent) of the senior adults were enrolled in courses at the University of Alberta. The remainder were enrolled at Athabasca University, Alberta Vocational Centre or Grant MacEwan Community College. The enrollment status of the respondents in the four institutions was one-third full-time and two-thirds as part-time.

Educational aspirations. The frequency distribution of the educational aspirations of senior adults is found in Table 4.5. Of senior adults who did not attend university in their youth, 68 percent indicated that they had aspired to do so. Of the respondents who did attend university in their youth, 55 percent claimed they had further aspirations to study in a different academic or professional field.

The 1984 course enrollment by senior adults is shown by frequency distribution in Table 4.6. The major findings indicate that nearly two-thirds (63.8 percent)

Table 4.5

Educational Aspirations of Senior Adults

Educational Aspirations	Frequency	Percent
Aspirations of nonattenders to attend college	51	68
Aspirations of attenders to change college field	47	54.7

Table 4.6

1984 Course Enrollment of Senior Adults

Discipline Area	Frequency	Percent
Arts	204	63.8
Education	33	10.4
Fine Arts	22	6.9
Science	21	6.6
Nursing	12	3.7
Other	11	3.4
Business	10	3.1
Home Economics	2	0.6
Library Science	2	0.6
Physical Education	2	0.6
Engineering	1	0.3
Total	320	100.0

were enrolled in Arts courses. The remainder were distributed among nine other disciplines with one-quarter (23.9 percent) enrolled in the combined areas of Education/Fine Arts/Science. The "other" category consisted of areas of enrollment for which there was insufficient information for discipline placement.

Educational influences. The factors influencing senior adults to participate in credit courses are found in Table 4.7.

Ninety percent of the respondents reported that the decision to participate in education was influenced by themselves. About half indicated that their spouse or partner had little or no influence on their decision. Parents were credited with much or moderate influence in 42 percent of the cases, whereas 58 percent attributed little or no influence on their decision to their parents. Over half (57.5 percent) of the senior adults reported children had much or moderate influence on their decision to participate in education. Instructors were reported by 48 percent to have had much or moderate influence on the respondents to participate in educational credit courses.

A variety of comments were reported which related "other" influences not accounted for by the previous five categories. Other influences were reported as having much influence by 49 percent of the respondents.

Comments on educational influences. Respondents were invited to comment on others who may have influenced their decision to participate in educational credit courses.

Table 4.7

Factors that Influenced the Participation of Senior Adults

Influences	Frequency	Percent
Yourself		
Much	118	89.4
Moderate	13	9.8
Little or No	1	0.8
Spouse/partner		
Much	24	29.3
Moderate	15	18.3
Little or No	53	52.5
Parents		
Much	15	21.7
Moderate	14	20.3
Little or No	40	57.9
Children		
Much	21	26.2
Moderate	25	31.3
Little or No	34	42.5
Instructors		
Much	17	23.3
Moderate	12.6	24.7
Little or No	38	39.7
Other		
Much	28	49.1
Moderate	8	14.0
Little or No	21	36.8

Friends were most frequently mentioned. "Close friends wanted me to join them in classes." Fellow students were influential as shown by comments like this: "Younger university students encouraged me to try it."

Family members also influenced adults to participate in credit courses: "My sisters, who are teachers, always took classes, so I decided I would, too."

Individuals who might collectively fit a "mentor" role, also had an impact on the decision to take courses as evidenced by comments regarding advice or encouragement received from: a pastor, priest, AADAC counsellor, medical doctor, and employer.

Further Comments

Respondents were invited to make "further comments" about their experiences as adult students. These comments were clustered into six different categories as found in Table 4.8.

The most common category of further comment was personal benefits, representing 36 percent. The following is a sample. "I appreciated being able to further my education after having dropped out of any form of education for 31 years."

Twenty-one percent of the comments related to the learning climate. The following is a typical sample. "At no time was I made to feel out of place because I was older; there was very good rapport with other students."

Comments on student support were made by 16 percent of the respondents. A comment like this was typical:

Table 4.8

Further Comments of Senior Adults

Categories	Frequency*	Percent
Personal benefits	70	36.0
Learning climate	42	21.0
Student support	32	16.0
Adult learning attitudes	26	13.0
Extracurricular pressures	17	9.0
Exams	9	5.0
	196	100.0

* Some respondents made comments which fit more than one category.

"I was surprised how well the younger students accepted and assisted me."

Comments on attitudes on adult learning were offered by 13 percent of the respondents. This is an example of the comments made: "A tremendous experience and I hope to continue in the future; there is still so much to learn."

Comments on extra-curricular pressures were made by nine percent of the respondents. A sample follows: "It has been taxing to juggle my outside responsibilities and my student workload. Regardless, I've found it both stimulating and rewarding."

Exams elicited five percent of the comments, including the following: "The writing of exams will always be a horror, because of time constraints."

3. What are the motivational orientations of senior adults as determined through the Education Participation Scale?

The 40 statements of the Education Participation Scale were factor analyzed using varimax rotation to answer this question. The purpose of this analysis was to explore the data for patterns of relationship and to describe the motivational orientations of senior adults by a smaller set of factors. The six factor solution was used and the results were compared with the E.P.S. Scoring Key validated by Boshier and Collins (1982) for General Form were used. Items were included in a factor if they satisfied the following criteria:

1. Items loading on a factor should be greater than or equal to 0.40.
2. An item should load decisively on one factor only. If an item loaded above 0.40 on more than one factor, it was not used for the purposes of factor interpretation and was listed with omitted items.
3. Items included in a factor should contribute logically to the meaning of the factor.

Description of Factors

The six factors used to describe motivational orientations were labelled: social contact, community service, professional advancement, social stimulation, external expectations and cognitive interest.

The item content of this compilation by Boshier, et al. (1983) was as follows:

1. Factor 1 (Social Contact): 9 items (2, 9, 14, 17, 19, 26, 31, 33, 38).
2. Factor 2 (Community Service): 5 items (4, 22, 23, 29, 39).
3. Factor 3 (Professional Advancement): 8 items (3, 10, 11, 13, 15, 18, 20, 32).
4. Factor 4 (Social Stimulation): 9 items (5, 8, 12, 16, 21, 24, 27, 28, 35).
5. Factor 5 (External Expectations): 5 items (6, 30, 34, 36, 40).

6. Factor 6 (Cognitive Interest): 4 items (1, 7, 25, 37).

The details of item content in each factor (refers to item content of factors from 1983 Study, Bosher, et al.) is shown in Appendix E.

Motivational Orientation Factors

The factor stucture showing item loading for this study is detailed in Table 4.9. A brief description of each factor and a summary of factor structure follows.

Factor 1, Social Contact, contained six of nine items in Boshier's (1982) Scoring Key and accounted for 18.3 percent of the variance. Item 9 appeared in Factor 3, and 19 in Factor 2. Item 33 failed to load above 0.40 and thus was listed as an omitted item. This factor contains items that indicate a need by individuals who score high on this dimension for personal association, participation in group activity, making new friends, etc.

Factor 2, Community Service, contained all of the original five items. The variance amounted to 13.1 percent. Included also were item 11 from Factor 3 and item 19 from Factor 1. Item 16 appeared, but was listed as an omitted item, since it also loaded on Factor 4. Individuals scoring high on this scale would seem to view their education for preparation for service to humanity.

Factor 3, Professional Advancement, contained six of the eight original items and had a variance of 7.0 percent. Missing were item 11, which appeared in Factor

Table 4.9

Education Participation Scale Factor Structure after Orthogonal Rotation

Variables (E.P.S. Items abbreviated)	Social Contact Factor I	Community Service Factor II	Professional Advancement Factor III	Social Stimulation Factor IV	External Expectations Factor V	Cognitive Interest Factor VI
Factor I						
38. New Friends	.80	.04	-.09	.15	.07	.16
26. Congenial People	.78	.05	-.06	.15	.03	.16
31. Social Relations	.76	.09	.15	.14	.07	.003
14. Personal Associations	.68	.19	-.07	.20	.06	.01
17. Part of a Group	.65	.20	.06	.28	.20	.01
2. Common Interest	.42	.12	.03	-.16	.15	.17
Factor II						
39. Community	.19	.79	.13	.11	-.02	-.16
22. Community Service	.15	.75	.11	.09	.14	-.19
23. Human Relations	.13	.70	.07	.004	-.04	.29
29. Serve Humankind	.19	.68	.24	.07	.17	-.03
19. Gain insight	.07	.53	.07	.14	-.08	-.02
4. Citizen	.11	.52	.35	-.01	-.15	.24
11. Supplement	-.03	.48	.01	.16	.29	.07
Factor III						
10. Job status	-.13	.08	.78	.04	.06	-.09
3. Professional Adv.	-.05	.20	.75	-.15	.04	-.17
18. Job competence	-.21	.17	.66	-.18	-.07	-.15
32. Formal requirement	-.17	.26	.62	-.12	.26	-.02
30. Keep up	.37	.002	.61	.12	.12	-.10
15. Competition	.10	-.02	.59	.02	.30	-.01
20. Earn degree	-.11	.36	.47	-.11	-.02	-.01
9. Accepted by Others	.17	.13	.42	.40	-.01	-.11
Factor IV						
5. Relief Boredom	.16	-.07	-.02	.82	-.11	.14
8. Frustration	.16	.11	.07	.79	-.11	.15
12. Vegetable	.05	.24	-.02	.68	.07	.16
21. Escape T.V.	.10	.06	-.14	.56	.18	-.12
Factor V						
36. Comply	.12	-.08	.10	-.05	.79	-.08
40. Instruction	.11	.15	.10	.14	.72	-.05
6. Recommendation	.03	-.09	.36	.08	.65	-.02
35. Educ. contrast	.26	.21	-.11	.04	.55	.08
Factor VI						
25. Joy of learning	.26	-.11	-.13	.06	-.04	.75
37. Sake of learning	.17	-.11	-.16	.10	.07	.75
1. Seek knowledge	.14	.01	-.09	.01	.02	.73
7. Enquiring	-.08	.22	-.07	.06	-.07	.62
Omitted Items						
13. Other courses	-.07	.34	.15	-.07	.34	.28
16. Narrow occupation	.11	.41	-.03	.42	.25	.11
24. Few hours	.35	.02	-.09	.21	-.01	.08
27. Life contrast	.45	.23	-.20	.44	.06	-.07
28. Break routine	.43	.02	-.07	.64	.15	-.01
33. Social position	.39	.26	.39	-.08	.37	-.04
34. Escape unhappiness	.34	-.15	.32	.04	.33	.08
Percentage Variance	18.3	13.1	7.0	5.8	4.6	4.4

2, and item 13, which was listed as an omitted item, since it failed to load above 0.40. Included from other factors were item 9 from Factor 1, and item 30 from Factor 5. High scorers on this scale are described by Morstain and Smart (1974) as individuals who perceive their education as highly job oriented and who possess a strong competitive desire.

Factor 4, Social Stimulation, contained four of the original nine items and had a variance of 5.8 percent. Missing was item 35 which appeared in Factor 5. Items 16, 24, 27 and 28 were all listed as omitted items. Item 16 also loaded above 0.40 in Factor 2, item 24 failed to load at or above 0.40 in any factor, items 27 and 28 also loaded above 0.40 in Factor 1. The content of these items identifies individuals who seem to be enrolled in courses to get relief from boredom, to remedy deficiencies in social life and educational background.

Factor 5, External Expectations, corresponds to what Boshier (1976) regarded as a group of learners enrolled in courses to carry out the expectations of some person with "authority" such as a priest, social worker or physician. This factor contained three of five items proposed by Boshier (1982) and had a variance of 4.6 percent. Item 35, from Factor 4, was included in this factor. Missing were item 30, which appeared in Factor 3, and item 34, which failed to load in any factor and hence was listed as an omitted item.

Factor 6, Cognitive Interest, contained all four items from Boshier's (1982) Scoring Key and had a variance of 4.4 percent. This group of learners chose learning just for the sake of learning.

4. What relationships exist between selected personal variables of senior adults and their responses on the Education Participation Scale?

Table 4.10 shows that 13 of a possible 38 Adult Student Demographic variables showed significant relationships with one or more of the six E.P.S. motivational orientations (factors). These 13 variables showed significant influence with from one to three of the six E.P.S. factors. They are as follows: gender, age and non-credit academic with three each; income, premature termination of education, aspiration (non-attender) and aspiration (attender) with two each; marital status, education, adversity, credit courses (Technical/ Vocational), credit course influence and non-credit course influence with one each. For example, in E.P.S. variable 1 (gender), females were shown to be significantly more influenced than males regarding Social Contact (Factor 1), professional advancement (Factor 3) and Cognitive Interest (Factor 6).

Examination of the six E.P.S. factors reveals that Factor 4 (Social Stimulation) showed a significant relationship with six of the A.S.D. variables whereas Factor 5 (External Expectations) was significantly

Table 4.10

Relationship between Adult Student Demographics Variables and Education Participation Scale Motivational Orientations

A.S.D. Variables	Motivational Orientations					
	1	2	3	4	5	6
1. Gender	.01* F>M		.05 F>M			.03 F>M
2. Age			.01 1>3	.01 1>3		.01 3>1
3. Marital status				.02 1>2		
8. Education	.04 1>3					
9. Income	.04 1>3			.03 1>3		
16. Adversity (curtail education)				.05 1>2		
18. Premature termination of education	.03 1>2			.01 1>2		
23. Credit tech./voc.		.01 1>2				
25. Credit influence		.05 1>2				
26. Non-credit academic			.01 2>1		.01 2>1	.02 1>2
32. Non-credit influence		.04 1>2				
33. Aspiration (non-attender)				.02 1>2		.00 1>2
34. Aspiration (attender)		.02 1>2	.02 1>2			

* Probability indicates level of statistical significance.

influenced by only one. The remaining four factors, Social Contact, Community Service, Professional Advancement and Cognitive Interest were significantly influenced by four variables each.

Summary

This chapter has presented a description and analysis of the data gathered from the Adult Student Demographics and Education Participation Scale questionnaires. Frequency and percentage distributions were presented to discuss the demographic data concerning the respondents. Factor analysis consisting of six factors was used to establish a motivational profile of the respondents.

Respondents' comments concerning their personal perceptions of their motivations for participation were categorized and described by frequency and percentage distributions.

T-tests and one-way analysis of variance were used to determine statistically significant mean differences between the variables presented in the A.S.D. and the six motivational orientation factors derived from E.P.S. data.

CHAPTER 5

Summary, Conclusions and Implications

This chapter includes the summary, conclusions and implications of the study. The first section provides a summarization of the study, including its purpose, methodology, data analyses and findings. The second section presents the conclusions which were derived from the findings. The final section presents implications for education and future research.

Summary

Purpose

The purpose of this study was to determine the motivational orientations of senior adults participating in postsecondary credit courses and to examine the influence of demographic and educational characteristics upon those orientations.

Subproblems

The following subproblems were addressed in this study:

1. What is the background of senior adults participating in postsecondary credit courses?
   (a) Demographic characteristics.
   (b) Socioeconomic characteristics.
   (c) Crisis experiences.
2. What are the educational experiences and aspirations of senior adults?

3. What are the motivational orientations of senior adults as determined through use of the Education Participation Scale?
4. What relationships exist between selected personal variables of senior adults and their responses on the Education Participation Scale?

Methodology

The data were collected using a two-part questionnaire survey. The first part, Adult Student Demographics, was designed by the investigator and consisted of 23 items. The second part, Education Participation Scale, was designed and validated by Dr. Roger Boshier. The questionnaire was distributed to all senior adults enrolled in credit courses in four public postsecondary institutions in metropolitan Edmonton.

Data Analyses

The data obtained from the two-part questionnaire (Adult Student Demographics and Education Participation Scale) were processed using the Statistical Package for the Social Sciences (Nie et al.: 1975). The following analyses were used in this study:

1. Frequency and percentage distributions were used to describe the demographic, socioeconomic and crisis characteristics, derived from A.S.D., of senior adults.
2. Factor analysis was used to establish a motivational orientation profile, derived from E.P.S.,

of senior adults.

3. T-tests and one-way analysis of variance were used to determine statistically significant differences among means of the six motivational orientation factors derived from the E.P.S. data and selected independent A.S.D. variables.

Findings

Background Characteristics of Senior Adults

1. What is the background of senior adults participating in postsecondary credit courses?

Demographic. The majority of respondents were: female (63 percent); between 55 and 59 years of age (60 percent); married (66 percent); born in Canada (70 percent); over 40 percent had four or more children (mean = 3.2) and 47 percent had a median of five children who currently were, or had been, enrolled in a postsecondary institution.

Socioeconomic. Over half of the seniors had completed the requirements for a university degree and 42 percent had family incomes exceeding $40,000 per year.

Crisis. Fifty-three percent of the seniors reported that they had experienced economic depression during their youth. Forty-seven percent had been exposed directly or indirectly to war. Sixty-five percent had experienced premature termination or curtailment of their education during youth.

Educational Experiences and Aspirations

2. What are the educational experiences and aspirations of senior adults?

Experiences. Three-quarters of seniors found childhood and youth school experiences to be enjoyable. A majority reported that they had participated in either or both of credit and non-credit courses prior to 1984, and about three-quarters of them considered that this experience had proven influential upon their decision to enroll in credit courses during 1984.

The typical senior adult enrolled as a part-time student at the University of Alberta in Arts courses.

Influence to enroll. Seniors attributed credit for influence to enroll in courses largely to themselves and to a lesser extent to friends and children.

Aspirations to attend. The majority of seniors who hadn't attended university during youth aspired to do so and, of those who did attend during youth, more than half aspired to study in another discipline.

Motivational Orientations of Seniors

3. What are the motivational orientations of senior adults as determined through use of the Education Participation Scale?

The six E.P.S. factors contained 33 out of 40 items and accounted for a combined variance of 53.2 percent. The item loading identified Social Contact as the single most important motivational factor for this sample of

senior adults, accounting for 18.3 percent of the variance. Community Service was the second most important factor accounting for 13.1 percent of the variance.

Professional Advancement, Social Stimulation, External Expectations and Cognitive Interest, respectively, accounted for 7.0 percent, 5.8 percent, 4.6 percent and 4.4 percent of the variance.

Relationships Between A.S.D. Variables and E.P.S. Factors

4. What relationships exist between selected personal variables of senior adults and their responses on the Education Participation Scale?

The Education Participation Scale factors were variously related to personal variables. The inclination toward enrollment during 1984 for factor reasons was significantly related to particular groupings of variables. The factors are listed in order of the greatest to least number of related variables as follows:

Social stimulation was related to six variables: younger (55 to 59), married, lower income, forced to curtail or prematurely terminate education, and aspired to attend university.

Social contact was related to four variables: female, high school education, lower income, forced to prematurely terminate education.

Community service was related to four variables: participated in courses prior to 1984, found credit and

non-credit courses influential on participation during 1984, and aspired to change field of study at university.

Professional advancement was related to four variables: female, younger, non-participants in non-credit courses prior to 1984, and aspired to change field of study at university.

Cognitive interest was related to four variables: female, older (65 and over), participants in non-credit courses prior to 1984, and aspired to attend university.

External expectations was related to one variable only: non-participant in non-credit courses prior to 1984.

Conclusions

The following conclusions are based on the findings of the study:

1. The typical profile of senior adults participating in postsecondary credit courses is:

   . A 57-year old female; born in Canada; married; and mother of three children, two of wnom are attending or have attended a postsecondary institution.

   . Completed a bachelor's degree, and the family income exceeds $40,000 per annum.

   . Experienced economic depression, exposure to the influence of war, and premature termination of education during youth.

2. The typical educational experiences and aspira-

tions of senior adults participating in credit courses is:

. Enjoyed childhood/youth school experiences.

. Aspired during youth to attend university.

. Participated in either credit or non-credit courses prior to 1984 and found them influential on further enrollment.

. Enrolled in Arts credit courses at the University of Alberta during 1984, due to their own motivating influence..

3. The six motivational orientations of senior adults participating in credit courses in order of importance are:

(a) Social Contact;

(b) Community Service;

(c) Professional Advancement;

(d) Social Stimulation;

(e) External Expectations; and

(f) Cognitive Interest.

4. The relationships of E.P.S. factors and independent variables suggest the following:

. Two dominant profiles emerged from these relationships:

(a) younger, married females who had a high school education, aspired to attend university and had not taken non-credit courses prior to 1984. These individuals were life-chance oriented and enrolled for "deficiency" motives;

(b) Older, married females, who aspired to attend university or to change programs, and prior to 1984 had taken non-credit courses, finding them influential on enrollment. These individuals were life-space oriented and enrolled for "growth" motives.

. Senior adults participated for a mixture of orientations both life-chance and life-space.

. . Personal variables dominated life-chance motives except in case of older females.

. Crises-related variables dominated relationships with life-chance motives.

. Education-influence related variables dominated relationships with life-space motives.

. Aspiration variables were equally split between life-chance and life-space motives.

. Seniors did not enroll for external expectations.

Discussion of Conclusions Related to Selected Literature

The findings of this study related, in varying degrees, to the reported literature.

Background Characteristics

Demographic characteristics.

Gender. Females made up 63 percent of the senior adults in the study. Reehling (1980) reported that the high enrollment of women is an outcome of changing attitudes toward gender roles. Comments by female

respondents suggested the existence of attitudes which may have restricted their participation in education during their youth.

Age. Younger seniors (55 to 59) dominated the over-55 cohort at 60 percent, however, the 65 and over subgroup, at 23 percent, exceeded the enrollment of the 60 to 64-year-olds by six percent. Marcus (1978) reported a similar observance and suggested that some older adults appear to be intensely involved in education demonstrating a focus on growth, a phenomenon not seen as frequently in younger seniors. These observations reflect those of Maslow (1967) who argues that self-actualization (growth) is to be found only in older people.

Marital status. Two-thirds of the respondents were married. Marriage was reported as a typical status of seniors involved in education by Battersby (1982b), however, Vinegrad (1980) considered it was more prevalent in the case of men than women. A higher incidence of marriage among male participants may indicate the significance of spousal support or that men have met lower level Maslowian needs through marriage and thus are free to pursue education to satisfy higher needs (Brady, 1984).

Children in postsecondary education. Forty-two percent of respondents, with a median of five children, reported children in postsecondary education. Hooper and March (1978) indicated that children attending university were reported as being influential upon the decision of parents to participate in classes. In this study,

children, were credited by 58 percent of the respondents as being of moderate to much influence on the decision to participate in courses.

Socioeconomic characteristics.

Educational attainment. Over half of the respondents held a university degree. Graney (1980) and Hooper and March (1978) claimed that educational attainment was the best predictor of participation. Busse (1977) and Covey (1983b) both suggested through the continuity theory that older individuals simply maintain patterns of educational involvement established early in life.

Income. Forty-two percent of seniors reported an income greater than $40,000 per year. Crimmins and Riddler (1985) reported that most surveys likewise indicate that higher income is linked to a higher level of participation in education.

Crisis experiences. Large numbers of respondents indicated economic depression (53 percent), influence of war (47 percent), premature termination of education and curtailment of education to seek employment (combination 65 percent). These events and their influences were also reported by Glanz and Tabory (1985) and Murphy (1982). Premature termination and/or curtailment of education was the natural outcome of the impact of economic depression and/or war according to Glanz (1985). Courtney (1981) and Flinck (1977) suggested that the accumulated experience could serve to create a sense of incompleteness which

translates into an educational need. This educational need could be considered a gap between present competencies and a higher level goal according to Knowles (1973). This need could serve as a driving force for participation thus fitting into the framework of the Maslow's (1954) needs hierarchy and through it into Boshier's congruence model (1973) or Cross's chain of response model (1981).

Educational Experiences and Aspirations

Education characteristics.

Early school experiences. Nearly three-fourths of the respondents found early education experiences to be exciting or satisfying. Previous educational background can, if positive, enhance further learning experiences according to Knox (1977) and Fisher (1986). Jones (1980) gave some additional hope in reporting that even if attitudes to education have been damaged by early experiences there is evidence that interest can be rekindled. Cross (1981), in describing her chain of response model, gave significant importance to attitudes toward education. Negative attitudes may prevent participation.

Previous contact with higher education. Respondents reported a moderate enrollment in general academic credit (55 percent) and non-credit (32 percent) courses. Dolan et al. (1984) considered non-credit enrollment as a "bridging" process. The University of Alberta Senate

report (1983) indicated that one-third of the adults who entered the University of Alberta as unclassified students did so after having taken university extension courses. Hooper and March (1978) reported that personal contact with significant others (family, friends or neighbours) who are, or have been, involved with the university has a positive impact on future enrollment. Boshier and Collins (1982) indicated that participants previously enrolled in non-credit courses were significantly more motivated for cognitive interest (learning for the sake of learning) than for other factors. This was also evidenced by results in this study; older females who had previously been enrolled in non-credit courses enrolled for cognitive interest.

Educational aspirations. Sixty-eight percent of the seniors indicated that they aspired, during their youth, to attend university; 58 percent of those who had attended some form of postsecondary institution during their youth revealed that they had aspired to change their field of study. A significant relationship was indicated between high aspiration for university attendance and participation for cognitive interest (learning for its own sake); also, those aspiring to change their field of study, enrolled for community service (a desire to serve humanity). These individuals, according to Peters and Boshier (1976), are largely life-space or growth motivated. Flinck (1977:59) added clarity to the role of aspirations in promoting participation when he claimed,

"the more exactly an individual is able to identify his aspirations and evaluate his actual level of competence in relationship to his aspirations, the more motivated he will be to study."

Cross (1981), in utilizing the previous work of Lewin (1947), Vroom (1964) and Rubenson (1977), incorporated the role of aspiration in her chain of response model. The "importance of goals and expectation that participation will meet goals" is identified as point C in the model (see Figure 2.1 on page 30). This might be said to be an aspiration and could be related to, or equivalent of, what Knowles (1973) refers to as an "educational need," the gap between between present competencies and further goals.

Motivational Orientations

Senior adults in this study were categorized into two groups. The first group, according Boshier (1973), could be labelled as life-chance or "deficiency" oriented. This group accounted for 36 percent of the variance. The second group was labelled as life-space or "growth" oriented and accounted for 17.5 percent of the variance.

According to Boshier (1973), the notion that participants can be identified as "deficiency" motivated or "growth" motivated is based upon Maslow's (1954) needs hierarchy. "Deficiency" oriented people who enroll in courses do so with intraself incongruence, that is, they enroll to satisfy lower level needs such as the need to

qualify for a better job (professional advancement) or for personal needs such as escaping boredom or gaining new friends (social stimulation and social contact). If they fail to achieve satisfaction with course enrollment they are susceptible to self/other incongruence, i.e. they find the course, instructor or institution incompatible and as as result, dissatisfaction or dropout may occur.

The "deficiency" motivated persons enroll to acquire utilitarian knowledge, attitudes or skills and these have more specific and shorter term objectives than do "growth" motivated people. Since they participate to meet specific needs, their participation patterns tend to be quite sporadic which is in contrast to the even, continuous pattern which Peters and Boshier (1976) indicate is typical of a "growth" motivated person.

It has been concluded in this study that the majority of senior adults enrolled to meet lower level Maslowian needs. The seniors response to the Education Participation Scale items resulted in a significant loading on the life-chance factors which, according to Boshier's (1982) factor typology, are collectively indicative of life-chance or "deficiency" motivations.

Relationships between Adult Student Demographics variables and Education Participation Scale factors

The relationship of personal/crises/educational variables with the six Education Participation Scale factors yielded 23 statistically significant

probabilities. These were observed to align with one or both of the profiles of life-chance/life-space motives. These findings are examined in relationship to selected literature.

Personal variables (gender, age, marital status, educational attainment and income) tended to show significant relationship with the life-chance factors, social contact, professional advancement and social stimulation. Younger senior adults showed a strong, significant relationship (.01) with professional advancement. Members of this subgroup could well be upgrading their skills in their current careers or making preparation for a career change. Older females, the exception in this group of variables, showed a significant relationship with the life-space factor, cognitive interest. This distinction parallels Maslow's (1962) claim that older people were more capable of self-actualizing (a life-space characteristic) than younger people. Maslow (1962), undoubtedly, was referring to a wider span of years than was considered in this study when distinguishing between younger and older seniors, but nonetheless the distinction is evident.

With regard to marital status showing a significant relationship with social stimulation (life-chance), Battersby (1982b) reported it to be typical of this age cohort, but Vinegrad (1980) considered marriage as more typical of male participants than women. Additional study may be required to clarify this relationship.

Low attainment of education and low level income related significantly with social contact and social stimulation. According to Boshier and Baker (1979), education and income, as primary components of socioeconomic status, are among the most powerful influences on adult participation. Since these were both of low level status, it is predictable for them to show significant relationships with life-chance (deficiency) motivations.

Crisis variables (adversity and premature termination of education). Adversity leading to curtailment of education during youth to gain employment showed weak relationship with social stimulation, however, premature termination of education showed a very significant relationship with that same factor, as well as with social contact. Crises variables related exclusively with life-chance motivations. Seniors who had their youth-time education interrupted by adversity, enrolled for social reasons, friendship or entertainment (lower level psychological needs).

Educational variables (credit/non-credit courses and their influence). The stimulus provided by previous educational experience, both credit and non-credit, was noticeable in that three variables relating to credit/non-credit participation and influence showed significant relationships with community service and cognitive interest, both of which are life-space oriented. Dolan et al. (1984) indicated that self-reports by senior

adults showed they perceived non-credit courses as providing a confidence-building step that influenced their eventual participation in credit courses. Fishtein and Feier (1982) and Boshier and Collins (1982) reported similar findings in groups particpating in non-credit courses.

Aspiration variables (aspiration to attend university and to change programs) were divided equally between the life-chance motives (professional advancement and social stimulation) and life-space motives (community service and cognitive interest). Aspirations (goals), according to Boshier (1973), Van Zandt and Peterson (1980) and Cross (1981), are the primary determinants which enable individuals to overcome environmental barriers and to participate in courses.

The only variable to show a significant relationship with external expectations, a life-chance factor, was non-participation in non-credit courses prior to 1984. Enrollment for external expectations is the carrying out of the expectations of some authority figure. This senior adult group attributed greatest credit to themselves as participation influencers; they were an independent, self-determined group.

The conclusion that senior adults participate in credit courses for a mixture of motives is supported by Boshier (1977) when he suggests that motivational orientations change throughout the life cycle. As developmental tasks are accomplished the amount of motivation attributable to life-chance and life-space

orientations changes. The individual may move from life-chance to life-space orientation and back. It is therefore possible that individuals participate at particular times in their life cycle for both life-chance and life-space motives.

Summary of Discussion

The relationship of mediating variables and motives reveals identifiable patterns of senior adult participation. Persons change with respect to their needs for education throughout the life cycle (Neugarten 1968). According to Boshier (1973), age is the most powerful of the mediating variables. As the individual moves through the life cycle, different "life-transitions" (Aslanian and Brickell, 1980) or "developmental tasks" (Havighurst, 1964), such as graduation, marriage, parenthood, death, divorce and retirement are encountered. As developmental tasks are satisfactorily completed, new ones present themselves; these are often the source of "educational needs" (Knowles, 1973). These educational needs of senior adults may provide the impetus for the initiation of a chain of response (Cross, 1981) which, if unimpeded by negative attitudes and environmental barriers, may translate into successful completion of a credit course.

As educational needs are encountered and participation occurs for "deficiency" motives, seniors may satisfy their lower level needs and progress toward participation for "growth" motives. As they become more

"growth" motivated, they will participate due to inner, higher level needs rather than environmental stresses which are low level needs. Growth motivated seniors will be better equipped, according to Boshier (1973), to deal with potential barriers and continue to participate on an ever-expanding scale. As self-actualizing persons, according to Maslow (1967:122), they are "far less dependent, far less beholden, far more autonomous and self-directed."

Implications

The data provided by this study resulted in some significant findings concerning senior adults and their motivational orientations. It is recognized, however, that much more research is required in this area. Caution is advised in applying these suggestions concerning implications for education and research.

Implications for Education

This study gives rise to several implications for the education of senior adults. For example, findings of this study indicate:

1. Institutions should develop a better understanding of the characteristics of their senior students in order to more effectively attract, advise and counsel them in their educational aspirations;

2. Institutions should survey their senior students (including extension and outreach) to determine what new

courses should be developed to meet their educational needs;

3. Institutions should provide a greater number of non-credit or audit options to facilitate the gradual integration of senior students into traditional programs;

4. Institutions should provide a wider choice of courses of a utilitarian nature and thus meet the employment preparation and social needs of senior students;

5. Greater cooperation is needed among postsecondary institutions for the transfer of credits and information to facilitate movement from one institution to another;

6. Institutions should make their programs and admission policies more widely known to the general public and thus promote participation by more senior adults; and

7. Institutions and community agencies should increase their cooperation in curriculum development to adapt programs whereby seniors may utilize their skills in contributing to their communities.

Implications for Further Research

Although this study has provided some useful information concerning the motivational orientations of senior adults, further research in this area might expand the existing data base as follows:

1. Conduct a replication of this study using a modified form of the Education Participation Scale by removing items relating to professional advancement and

external expectation (a 35 item E.P.S. scale designed by Boshier et al., 1978);

2. Conduct a study of senior adults who cope more/less successfully using a revised Adult Student Demographics, the Education Participation Scale and an appropriate attitude inventory;

3. Conduct further research in an attempt to find interrelationships of primary mediating personal/educational variables of senior adults by using a multivariate approach with a form of manipulation of variables with a factor design;

4. Conduct an experiment with senior adults relating the findings to a participation model, such as chain of response (Cross, 1981), and manipulate variables in an attempt to facilitate participation;

5. Conduct a study using an ethnographic research method to investigate the impact of educational influences on individuals who have progressed as senior adult students from, for example, Alberta Vocational Centre to Grant MacEwan Community College and/or Athabasca University and/or University of Alberta;

6. Conduct a comparative study of the motivational orientations of senior adult students at Alberta Vocational Centre and Athabasca University, using both survey and ethnographic research methodologies; and

7. Conduct a longitudinal survey and ethnographic study of a small group, such as the eleven senior adult

students from Athabasca University who returned their questionnaires in this study (92 percent rate of return).

REFERENCES

Aslanian, C. B. and H. M. Brickell
1980 Americans in Transition: Life Changes as Reasons for Adult Learning. New York: Future Directions for a Learning Society, College Board.

Battersby, David
1982a "Gerogogy." Australian Journal of Adult Education, Vol. 22, No. 2, 28-34.

Battersby, David
1982b "Education and the Elderly in New Zealand." Studies in Adult Education, Vol. 14, 23-29.

Booth, A.
1961 "A demographic consideration of non-participation."Adult Education, Vol. 11, 223-229.

Boshier, Roger
1971 "Motivational Orientations of Adult Education Participants: A Factor Analytic Exploration of Houle's Typology." Adult Education, Vol. 21, No. 2, 3-26.

Boshier, Roger
1973 "Educational Participation and Dropout: A Theoretical Model." Adult Education, Vol. 23, No. 4, 225-282.

Boshier, Roger
1976 "Factor Analysts at Large: a critical review of the motivational orientation literature." Adult Education, Vol. 27, No. 1, 24-27.

Boshier, Roger
1977 "Motivational Orientations Revisited: Life-space Motivation and the Education Participation Scale." Adult Education, Vol. 27, No. 2, 89-115.

Boshier, Roger
1978 "Relationship between Motives for Participation and Dropout from Adult Education." Psychological Reports, Vol. 43, 23-26.

Boshier, Roger
1979 "Research on Participation: A Conceptual and Methodological Perspective." Australian Journal of Adult Education, Vol. 19, No. 3, 3-20.

Boshier, Roger and Gail Riddell
1978 "Education Participation Scale Factor Structure for Older Adults." Adult Education, Vol. 28, No. 3, 165-175.

Boshier, Roger and Gary Baker
1979 "Effects of Fees on Clientele Characteristics and Participation in Adult Education." Adult Education, Vol. 29, No. 3, 151-169.

Boshier, Roger and J. B. Collins
1982 "Education Participation Scale Factor Structure and Socio-demographic Correlates for 12,000 Learners." International Journal of Lifelong Education, Vol. 2, No. 2, 163-167.

Brady, E. Michael
1984 "Demographic and Educational Correlates of Self-reported Learning among Older Students." Educational Gerontology, Vol. 10, No. 1-2, 25-38.

Brunner, E. deS., D. S. Wilder, C. Kirchner and J. S. Newberry, Jr.
1959 An Overview of Adult Education Research, Chicago: Adult Education Association of the U.S.A.

Burgess, Paul D.
1971 "Reasons for Adult Participation in Group Educational Activities." Adult Education, Vol. 22, No. 1, 3-29.

Busse, E. W.
1977 "Theories of Aging." In E. W. Busse and E. Pfeiffer (Eds.), Behavior and Adaptation in Late Life, Boston: Little and Brown.

Busse, E. W.
1983 Proceedings from the Alberta Symposium on Aging - 1982: Guidelines for the Future, Edmonton: Government of Alberta. Social Services and Community Health.

Buttedahl, Knute and Coolie Verner
1965 "Characteristics of Participants in Two Methods of of Adult Education." Adult Education, Vol. 15, No.2, 67-73.

Coombe, Kennece and David Battersby
1984 "The Continuing Education of the Elderly." Australian Journal of Adult Education, Vol. 24, 5-10.

Courtney, Sean
1981 "The Factors Affecting Participation in Adult Education: An Analysis of Some Literature." Studies in Adult Education, Vol. 13, No. 2, 98-111.

Covey, H. C.
1982 "Preliminary Findings on Designing Higher Education Programs for Older People." Educational Gerontology, Vol. 8, No. 5, 463-471.

Covey, H. C.
1983a "Higher Education and Older People: Some Theoretical Considerations, Part I." Educational Gerontology, Vol. 9, No. 1, 1-13.

Covey, H. C.
1983b "Higher Education and Older People: Some Theoretical Considerations, Part II." Educational Gerontology, Vol. 9, No. 2-3, 95-109.

Covey, H. C.
1983c "Perceptions of Activity and Participation in the College Student Role by Older Adults." Educational Gerontology, Vol. 9, No. 5-6, 463-469.

Crimmins, Eileen M. and Elizabeth W. Riddler
1985 "College Enrollment Trends among the Population Thirty-five and Older: 1972-1982 and Projections to 2000." Educational Gerontology, Vol. 7, No. 5-6, 363-385.

Cross, K. Patricia
1981 Adults as Learners: Increasing Participation and Facilitating Learning, San Francisco: Jossey-Bass Inc.

Darkenwald, G. G. and S. B. Merriam
1982 Adult Education: Foundations of Practice, New York: Harper and Row.

Dellmann-Jenkins, M. M. and Diane E. Papalia-Finlay
1983 "Older Adults' Participation in University Classes: Cognitive, Morale and Family Correlates." Educational Gerentology, Vol. 9, No. 5, 501-509.

Devereaux, M. S.
1985 One in Every Five: A Survey of Adult Education in Canada, Ottawa: Government of Canada. Statistics Canada and Department of the Secretary of State.

Dickinson, G.
1971 "Educational Variables and Participation in Adult Education: An Exploratory Study." Adult Education (Wash.), Vol. 22, No. 1, 36-47.

Dolan, Teresa and Carole Fitzgerald, Jo Messer and Margot Townsend
1984 "New Opportunities for Women." Adult Education (London), Vol. 57, No. 2, 140-142.

Douglah, M. and G. Moss
1968 "Differential Participation Patterns of Adults of Low and High Educational Attainment." Adult Education (Wash.), Vol. 18, No. 4, 247-259.

Dowling, W. D.
1963 "A Study of Adult Education Participants in Green Bay, Wisconsin." Journal of Experimental Education, Vol. 32, No. 1, 85-93.

Erickson, David Vincent
1983 A Case Study Approach Towards the Development of a Theory of Participation in Adult Education, Unpublished Master's Thesis, Edmonton: University of Alberta.

Essert, P. L. and R. B. Spence
1968 "Continuous Learning through the Educative Community: An Exploration of the Family-educational, the Sequential-unit, and the Complementary-functional Systems." Adult Education (Wash.), Vol. 18, No. 4, 260-271.

Evans, Jeremy
1984 "Some Statistics on Older Students in Australia Tertiary Education." Australian Journal of Adult Education, Vol. 24, No. 3, 21-28.

Farnum, H. B.
1960 "A Survey of Students in University Extensions." Adult Education (London), Vol. 11, 23-28.

Fisher, James C.
1986 "Participation in Educational Activities by Active Older Adults." Adult Education Quarterly, Vol. 36, No. 4, 202-210.

Fishtein, Oscar and C. D. Feier
1982 "Education for Older Adults: Out of the College and into the Community." Educational Gerontology, Vol. 28, No. 3, 243-249.

Flinck, Rune
1977 "Why do Adults Participate in Education?" Pedogogical Reports, No. 9, Lund, Sweden: Department of Education, University of Lund.

Glanz, David and Ephraim Tabory
1985 "Higher Education and Retirement: The Israeli Experience." Educational Gerontology, Vol. 11, Nos. 2 and 3, 101-111.

Goble, Frank
1971 The Third Force, New York: Simon and Schuster.

Graney, M. J.
1980 "Participation in Education among Older People." Alternative Higher Education, Vol. 5, No. 1, 71-86.

Haag, U.
1976 "Psychological Foundations of Motive for Participation in Adult Education." Unpublished Master's Thesis, University of British Columbia.

Hausafus, C. O., P. Ralston and P. DeLanoit
1985 "Rural Older Adults: Participation in and Perceptions of an Educational Delivery System." Educational Gerontology, Vol. 7, No. 4-6, 211-223.

Havighurst, R. J.
1964 "Changing Status and Roles during the Adult Life Cycle: Significance for Adult Education." In H. W. Burns (Ed.), Sociological Backgrounds of Adult Education. Chicago, Center for the Study of Liberal Education for Adults.

Havighurst, R. J.
1970 "Changing Status and Roles during the Adult Life Cycle: Significance for Adult Education." Sociological Backgrounds of Adult Education, Syracuse, N.Y.: Syracuse University Publications in Continuing Education.

Hewes, Betty
1983 Proceedings from the Alberta Symposium on Aging - 1982: Guidelines for the Future, Edmonton: Government of Alberta. Social Services and Community Health.

Hooper, J. D. and G. R. March
1978 "A Study of Older Students Attending University Classes." Educational Gerontology, Vol. 3, No. 1, 321-330.

Houle, C. O.
1961 The Inquiring Mind, Madison: University of Wisconsin Press.

Ingram, E. J., A. G. Konrad and J. M. Small
1979 Toward a Yukon College, Edmonton: University of Alberta.

Jacobs, H. L.
1970 "Education for Aging." In A. M. Hoffman (Ed.), The Daily Needs and Interests of Older People, Springfield, Ill.: Charles C. Thomas.

Jarvis, Peter
1983 "Education and the Elderly." Adult Education, Vol. 55, No. 4, 343-350.

Johnstone, J. W. C.
1964 "Adult Uses of Education: Fact and Forecast." In H. W. Burns (Ed.), Sociological Background of Adult Education, Chicago: Center for the Study of Liberal Education for Adults.

Johnstone, J. W. C. and Ramon J. Rivera
1965 Volunteers for Learning: A Study of Educational Pursuits of American Adults, Chicago: Aldine.

Jones, Robert K.
1980 "Making University Accessible to Working Adults." Canadian Journal of University Continuing Education, Vol. 6, No. 2, 42-44.

Kasworm, Carol E.
1980 "The Older Student as an Undergraduate." Adult Education, Vol. 31, No. 1, 30-47.

Kingston, Albert J.
1982 "The Senior Citizen as College Student." Educational Gerontology, Vol. 8, No. 1, 43-52.

Knowles, Malcolm S.
1970 The Modern Practice of Adult Education, New York: Association Press.

Knowles, Malcolm S.
1973 The Modern Practice of Adult Education: Androgogy versus Pedagogy, New York: Association Press.

Knox, A. B.
1977 Adult Development and Learning, San Francisco: Jossey-Bass.

Knox, A. B. and R. Videbeck
1963 "Adult Education and Adult Life Cycles." Adult Education, Vol. 13, 102-121.

Knox, A. B. and D. D. Sjogren
1964 "Achievement and Withdrawal in University Adult Education Classes." Adult Education (London), Vol. 15, No. 2, 74-78.

Lewin, K.
1947 "Frontiers in Group Dynamics." Human Relations, Vol. 1, 5-41.

London, J., R. Wenkert and W. Hagstrom
1963 Adult Education and Social Class, U. S. Department of Health, Education and Welfare, Office of Education, Cooperative Research Project No. 1017, Berkeley: University of California, Survey Research Center.

Luckham, B.
1971 "The Characteristics of Adult Education in Students." Studies in Adult Education, Vol. 3, No. 2, 118-139.

Marcus, Edward E.
1978 "Effects of Age, Sex and Status on Perception of the Utility of Educational Participation." Educational Gerentology, Vol. 3, No. 4, 295-317.

Maslow, Abraham H.
1954 Motivation and Personality, New York: Harper and Row.

Maslow, A. H.
1962 Toward a Psychology of Being, New York: Van Nostrand.

Maslow, A. H.
1967 "A Theory of Metamotivation: the Biological Rooting of the Value-Life." Journal of Humanistic Psychology, Vol. 7, No. 2, 93-127.

Maslow, Abraham
1970 Motivation and Personality, New York: Harper and Row.

McCallon, Earl and E. McCray
1975 Designing and Using Questionnaires, Austin, Texas: Learning Concepts.

McClusky, Howard Y.
1980 "Cognitive Performance and Mental Ability: Implications for Learning in the Later Years." Alternative Higher Education, Vol. 5 (1), 18-29.

McKinnon, Fred
1983 Proceedings from the Alberta Symposium of Aging - 1982: Guidelines for the Future, Edmonton: Government of Alberta. Social Services and Community Health.

Merriam, Sharan and Larry Mullins
1981 "Havighurst's Adult Developmental Tasks: A Study of their Importance Relative to Income, Age and Sex." Adult Education, Vol. 31, No. 3, 123-141.

Miller, H. L.
1967 Participation of Adults in Education: A Forcefield Analysis, Boston: Centre for the Study of Liberal Education for Adults, Boston University.

Mills, Winnifred C.
1979 "Demographic Characteristics and Motivation Orientation of Registered Nurses Enrolled as Part-time University Students." Unpublished Master's Thesis, University of Alberta.

Morstain, Barry R. and John C. Smart
1974 "Reasons for Participation in Adult Education Courses: A Multivariate Analysis of Group Differences." Adult Education, Vol. 24, No. 2, 83-98.

Morstain, B. R and J. C. Smart
1977 "A Motivational Typology of Adult Learners." Journal of Higher Education, Vol. 48, No. 6, 665-678.

Murphy, Lawrence
1982 "Adults in College: Promise or Reality?: An Essay Review." The Review of Higher Education, Vol. 5, No. 3, 169-175.

Neugarten, Bernice (ed.)
1968 "Adult Personality: Toward a Psychology of the Life Cycle." Middle Age and Aging, Chicago: University of Chicago Press.

Nidiffer, Wayne W. and Allen B. Moore
1985 "Attitudes of University Administrators toward Older Adults." Educational Gerontology, Vol. 11, No. 5-6, 387-399.

Nie, N. H., H. C. Hull, J. G. Jenkins, K. Stinbrenner and D. H. Bent
1975 Statistical Package for the Social Sciences, New York: McGraw-Hill.

Norris, C.
1985 "Towards a Theory of Participation in Adult Education." Adult Education (London), Vol. 58, No. 2, 122-126.

Peters, John M. and Roger Boshier
1976 "Adult Needs, Interests, and Motives." In Materials and Methods in Continuing Education, C. Klevins (Ed.), New York: Klevins Publications.

Rebok, G. W.
1981 "Aging and Higher Education: Prospects for Intervention." Educational Gerontology, Vol. 6, No. 1, 39-48.

Reehling, Jean E.
1980 "They are returning: but, are they staying?" Journal of College Student Personnel, Vol. 21, No. 8, 491-497.

Romaniuk, J. G. and Michael Romaniuk
1982 "Participation Motives of Older Adults in Higher Education: The Elderhostel Experience." The Gerontologist, Vol. 22, No. 4.

Rubenson, K.
1977 Participation in Recurrent Education: A Research Review. Paper presented at a meeting of National Delegates on Developments in Recurrent Education, Paris.

Ryan, Steve
1985 "The Open University and Older Students." Adult Education (London), Vol. 58, No. 3, 241-245.

Sheffield, S. B.
1964 "The Orientations of Adult Continuing Learners." In D. Solomon (Ed.), The Continuing Learner, Chicago: Center for the Study of Liberal Education for Adults.

Sheppard, N. Alan
1980 "The Response of Higher Education to Older Adults: A Federal Perspective." Alternative Higher Education, Vol. 5, No. 1, 7-17.

Snider, J. C.
1983 "Guides to Growth in the Gray Classroom." Lifelong Learning: The Adult Years, Vol. 6, No. 5, 18-20.

Statistics Canada
1982 Census of Canada 1981, Educational, Scientific and Cultural Division, Government of Canada.

Stone, L. O. and Susan Fletcher
1980 A Profile of Canada's Older Population, Montreal: Institute for Research of Public Policy.

Treece, Eleanor and James Treece
1977 Elements of Research in Nursing, St. Louis: C. V. Mosky.

University of Alberta Senate
1983 Report of the Task Force on Mature Students.

Van Zandt, Sally and David A. Peterson
1980 "Golden Age 4-H Club: An Experience in Adult Education." Lifelong Learning: The Adult Years, Vol. 4, No. 3, 18-21.

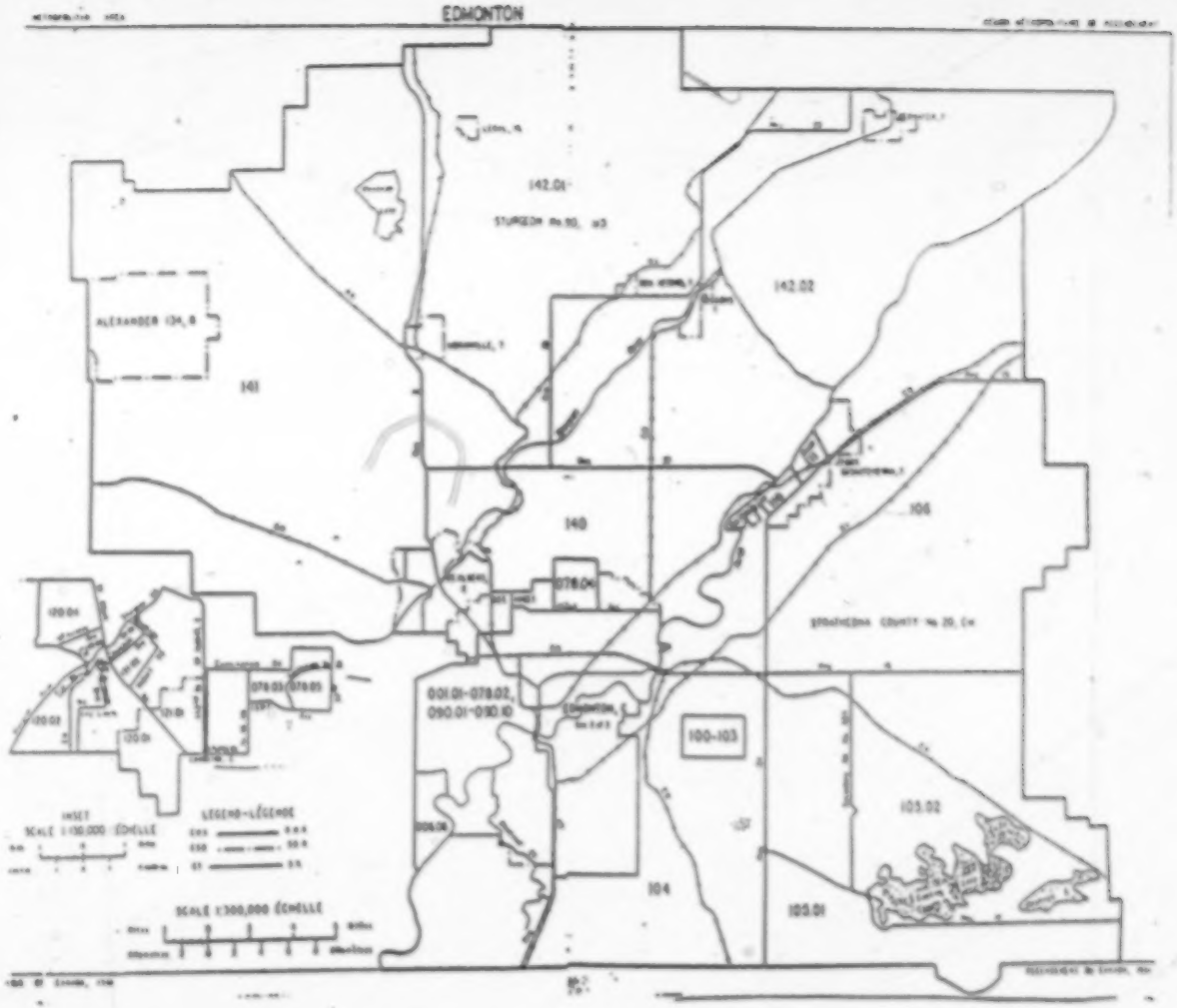
Vinegrad, M. D.
1980 "A Profile of Part-time Adult Degree Students." Studies in Adult Education, Vol. 12, No. 2, 147-154.

Vroom, V. H.
1964 Work and Motivation, New York: Wiley and Sons, Inc.

Wolfgang, Mary E. and W. D. Dowling
1981 "Differences in Motivation of Adults and Younger Undergraduates." Journal of Higher Education, Vol. 2, No. 6, 640-648.

Appendix A

Map of Metropolitan Edmonton Area


EDMONTON
142.01
142.02
141
140
106
001.01-078.02,
090.01-090.10
100-103
104
103.02
103.01
INSET
SCALE 1:100,000 ÉCHELLE
LEGEND-LÉGENDE
SCALE 1:300,000 ÉCHELLE

Appendix B

Adult Student Demographics

and

Education Participation Scale

UNIVERSITY OF ALBERTA

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

Adult Student Demographics

Please answer the following questions by circling the number on the right, writing in the answer, or checking in the appropriate space(s) as indicated.

Do not write in this space

I.D. 1 2 3 4

1. Your gender:

Female	1	
Male	2	5

2. Your age category:

50 - 54	1	6
55 - 59	2	
60 - 64	3	
65 - 69	4	
70 - 74	5	
75 - 79	6	
80 and over	7	

3. Your marital status:

Single	1	7
Married	2	
Cohabiting	3	
Widow	4	
Widower	5	
Divorced	6	

4. Number of children _____ 8

5. Number of children who currently are enrolled in or have been enrolled in postsecondary programs _____ 9

6. Your country of birth:

Canada	1	10
Other - Specify _____	2	11
If other, indicate age at immigration: _____ years		12

7. Your highest level of formal education:

Elementary school	1	13
Some high school	2	
High school completed	3	
Some technical, vocational training	4	
Journeyman certificate	5	
Some college or university	6	
College certificate program	7	
University degree	8	
University graduate degree	9	
Other (e.g. nursing R.N.; accounting R.I.A.)	0	

Specify _____

8. Total family annual income during 1984 or in the last year of full employment: 14

Less than $9,999	1
$10,000 to $19,999	2
$20,000 to $29,999	3
$30,000 to $39,999	4
$40,000 to $49,999	5
Over $50,000	6

9. Your early childhood school experience could best be described as:

Exciting	1	15
Satisfying	2	
Non-controversial	3	
Boring	4	
Unpleasant	5	

10. Your school experiences during youth (teenage years) could best be described as:

Exciting	1	16
Satisfying	2	
Non-controversial	3	
Boring	4	
Unpleasant	5	

11. Experiences which you encountered during childhood or youth that you would class as "major life adversities" include:

(Circle all those that apply)

War	1	17
Death in family	2	18
Separation from family	3	19
Economic depression	4	20
Curtailment of education to seek employment	5	21
Other (please indicate and elaborate, if you wish)	6	22

_____

_____

_____

12. Were you ever compelled to prematurely terminate your education during youth? Cirle yes or no.

1. Yes 2. No 23

If yes, explain _____

_____

_____

13. Prior to December 31, 1983, did you take credit courses in any of the following areas? Circle yes or no for each, and if yes, how many?

		How many?	
(a) General academic courses	1. Yes 2. No	____	24,25
(b) Business and professional courses	1. Yes 2. No	____	26,27
(c) Technical and vocational courses	1. Yes 2. No	____	28,29

14. If you answered yes in #13, to what extent has involvement in those courses influenced you to enroll in current postsecondary credit courses? Circle one choice.

Much influence	1	30
Moderate influence	2	
Little influence	3	
No influence	4	

Explain if you wish _____

_____

_____

15. Prior to December 31, 1983, did you take non-credit courses in any of the following areas? Circle yes or no for each, and if yes, how many?

		How many?	
(a) General academic courses	1.Yes 2.No	____	31,32
(b) Business and professional courses	1.Yes 2.No	____	33,34
(c) Technical and vocational courses	1.Yes 2.No	____	35,36

16. If you answered yes in #15, to what extent has involvement in those courses influenced you to enroll in current postsecondary non-credit courses? Circle one choice.

Much influence 1 37
Moderate influence 2
Little influence 3
No influence 4

Explain if you wish _____

_____

_____

17. If you did not attend college or university in your youth, did you ever dream of or aspire to study in an academic field or prepare for a professional career? Circle yes or no.

1. Yes 2. No 38

If yes, specify _____

_____

_____

18. If you did attend college or university in your youth, did you ever dream or aspire to study in a different academic or professional field from that in which you were enrolled? Circle yes or no.

1. Yes 2. No 39

If yes, specify _____

_____

_____

19. Identify an individual or individuals whom you would judge, influenced your decision to participate in educational credit course(s) and indicate the extent of that influence. Circle a number in each category.

PERSON(S)	INFLUENCE				
	Much	Moderate	Little	No	
Yourself	1	2	3	4	40
Spouse/Partner	1	2	3	4	41
Parent(s)	1	2	3	4	42
Child(ren)	1	2	3	4	43
Instructor(s)	1	2	3	4	44
Other (specify)	1	2	3	4	45

Please explain if you wish _____

_____

20. What course(s) were you enrolled in at a postsecondary institution in 1984? _____ 46

_____

_____

21. At which institution were you enrolled in 1984? 47

Alberta Vocational Centre 1
Athabasca University 2
Grant MacEwan Community College 3
University of Alberta 4

22. What was your 1984 student status?

Full time 1
Part time 2

48

23. Please make any further comments about your experience as an adult student.

49

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

THANK YOU FOR YOUR PARTICIPATION. Please return this questionnaire together with the Education Participation Scale in the enclosed envelope to:

Mr. Glen Ellingson
c/o Dr. A. G. Konrad
Dept. of Ed Admin
University of Alberta
EDMONTON, Alberta
6G 2G5

COPYRIGHTED MATERIAL IN THIS THESIS HAS NOT BEEN FILMED. IT IS AVAILABLE FOR CONSULTATION, HOWEVER, FROM THE AUTHOR'S UNIVERSITY LIBRARY.

DANS CETTE THESE, UN DOCUMENT ENCORE SOUS L'EFFET DU DROIT D'AUTEUR, N'A PAS ETE FILME. IL EST CEPENDANT DISPONIBLE POUR CONSULTATION A LA BIBLIOTHEQUE DE L'UNIVERSITE DE L'AUTEUR.

Leaves 114-116

Feuillets 114-116

National Library of Canada

Canadian Theses Service

Bibliothèque nationale du Canada

Service des thèses canadiennes

EDUCATION PARTICIPATION SCALE

©Roger Boshier
1982
Reprinted, 1983
Reprinted, 1984

Published by Learningpress Ltd., Box 46403, Station G, 3760 West 10th Ave, Vancouver, B.C. V6R 2G0 Canada

TO WHAT EXTENT DID THESE REASONS INFLUENCE YOU TO ENROLL IN YOUR ADULT EDUCATION CLASS?

Think back to when you enrolled for your course and indicate the extent to which each of the reasons listed below influenced you to participate. **Circle** the category which best reflects the extent to which each reason influenced you to enroll. There are 40 reasons listed. Circle **one** category for each reason. Please be **frank**. There are **no** right or wrong answers.

1. To seek knowledge for its own sake	No influence	Little influence	Moderate influence	Much influence
2. To share a common interest with my spouse or friend	No influence	Little influence	Moderate influence	Much influence
3. To secure professional advancement	No influence	Little influence	Moderate influence	Much influence
4. To become more effective as a citizen	No influence	Little influence	Moderate influence	Much influence
5. To get relief from boredom	No influence	Little influence	Moderate influence	Much influence
6. To carry out the recommendation of some authority	No influence	Little influence	Moderate influence	Much influence
7. To satisfy an enquiring mind	No influence	Little influence	Moderate influence	Much influence
8. To overcome the frustration of day to day living	No influence	Little influence	Moderate influence	Much influence
9. To be accepted by others	No influence	Little influence	Moderate influence	Much influence
10. To give me higher status in my job	No influence	Little influence	Moderate influence	Much influence
11. To supplement a narrow previous education	No influence	Little influence	Moderate influence	Much influence
12. To stop myself becoming a "vegetable"	No influence	Little influence	Moderate influence	Much influence
13. To acquire knowledge to help with other educational courses	No influence	Little influence	Moderate influence	Much influence
14. To fulfill a need for personal associations and friendships	No influence	Little influence	Moderate influence	Much influence
15. To keep up with competition	No influence	Little influence	Moderate influence	Much influence
16. To escape the intellectual narrowness of my occupation	No influence	Little influence	Moderate influence	Much influence
17. To participate in group activity	No influence	Little influence	Moderate influence	Much influence
18. To increase my job competence	No influence	Little influence	Moderate influence	Much influence

19. To gain insight into my personal problems	No influence	Little influence	Moderate influence	Much influence
20. To help me earn a degree, diploma or certificate	No influence	Little influence	Moderate influence	Much influence
21. To escape television	No influence	Little influence	Moderate influence	Much influence
22. To prepare for community service	No influence	Little influence	Moderate influence	Much influence
23. To gain insight into human relations	No influence	Little influence	Moderate influence	Much influence
24. To have a few hours away from responsibilities	No influence	Little influence	Moderate influence	Much influence
25. To learn just for the joy of learning	No influence	Little influence	Moderate influence	Much influence
26. To become acquainted with congenial people	No influence	Little influence	Moderate influence	Much influence
27. To provide a contrast to the rest of my life	No influence	Little influence	Moderate influence	Much influence
28. To get a break in the routine of home or work	No influence	Little influence	Moderate influence	Much influence
29. To improve my ability to serve humankind	No influence	Little influence	Moderate influence	Much influence
30. To keep up with others	No influence	Little influence	Moderate influence	Much influence
31. To improve my social relationships	No influence	Little influence	Moderate influence	Much influence
32. To meet formal requirements	No influence	Little influence	Moderate influence	Much influence
33. To maintain or improve my social position	No influence	Little influence	Moderate influence	Much influence
34. To escape an unhappy relationship	No influence	Little influence	Moderate influence	Much influence
35. To provide a contrast to my previous education	No influence	Little influence	Moderate influence	Much influence
36. To comply with the suggestions of someone else	No influence	Little influence	Moderate influence	Much influence
37. To learn just for the sake of learning	No influence	Little influence	Moderate influence	Much influence
38. To make new friends	No influence	Little influence	Moderate influence	Much influence
39. To improve my ability to participate in community work	No influence	Little influence	Moderate influence	Much influence
40. To comply with instructions from someone else	No influence	Little influence	Moderate influence	Much influence

Appendix C

Letters of Permission

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL ADMINISTRATION

THE UNIVERSITY OF ALBERTA
EDMONTON, CANADA
T6G 2G5

October 29, 1984

Ms. Flora DeCoteau,
Registrar,
Grant MacEwan Community College,
Box 1796,
Edmonton, Alberta T5J 2P2

Dear Madam:

I am currently involved in a research study which focuses on the extent to which senior adults (55 years and over) have become involved in postsecondary education. The first phase of the study includes the determination of the number of this cohort who have actually registered in credit courses of postsecondary institutions.

I would be grateful if you could provide me with the names and addresses of all individuals (55 years and over) enrolled at your institution during any of the registration periods in 1984.

Thank you for your valuable assistance.

Sincerely,

Glen R. Ellingson,
Graduate Student

GRE/le

NORTHERN ALBERTA
INSTITUTE OF TECHNOLOGY

11762-106 Street
Edmonton, Alberta
Canada, T5G 2R1

Office of the Registrar
Phone (403) 471-7411

November 8, 1984

Glen R. Ellingson
Faculty of Education
The University of Alberta
EDMONTON, Alberta
T6G 2G5

Dear Mr. Ellingson:

RE: SENIOR ADULT STUDENTS--55 YEARS AND OVER

We have a statistical printout which indicates that we have a total of 11 students in this category. Regretfully we are unable to pull them by using the computer and are not in a position to search for them through the 6,000 student records on hand.

Sorry, that we are unable to help you at this time.

Yours truly,

L. C. Semrau
Registrar
471-8791

/yk

THE UNIVERSITY OF BRITISH COLUMBIA

Adult Education
Department of Administrative,
Adult and Higher Education
5760 Toronto Road
Vancouver, B.C. Canada V6T 1L2

Telephone (604) 228-5881

April 19, 1989

Dr. Abe Konrad
Faculty of Education
633 Education South
University of Alberta
Edmonton, Alberta T6G 2G5

Dear Abe,

With reference to Ellingson's thesis please consider this to be permission for him to reproduce the factor loading table from Boshier and Collins (1982).

With reference to the E.P.S. itself, permission for reproduction is not normally granted but seeing as we are operating on a grandfather clause for this one he can reproduce it in the thesis but this should not be construed by others as constituting permission for reproduction.

Yours,

Roger Boshier,
Professor of Adult Education.

RB/jy

Appendix D

Covering Letters and Request Form

University of Alberta
Edmonton
Canada T6G 2G5

Department of Educational Administration
Faculty of Education
7-104 Education Building North, Telephone (403) 432-5241

As a graduate student working toward a Master of Education degree, I am currently involved in a research study designed to determine factors which influence adults to become involved in credit courses at a postsecondary institution.

Research findings indicate a marked increase in educational participation by adults in recent years. This involvement seems to indicate personal qualities of courage and intellectual curiosity.

This study involves adults in the greater Edmonton area who were enrolled in a credit course during 1984. Please complete the enclosed two part questionnaire (Adult Student Demographics and Education Participation Scale) to help us develop a better understanding of adult participation in postsecondary education. I assure you that the information which you provide will be kept in strictest confidence. Data will be reported only in summary form and no personal identification will be made in the study.

Your participation is most important for the success of this project. I wish to thank you in advance for your valued contribution. Please return the questionnaire within one week, if at all possible, in the enclosed envelope. If you are interested in a summary of the findings, please return the enclosed card separately from the questionnaire.

Sincerely yours,

Glen R. Ellingson,
Graduate Student

Abram G. Konrad, Ph.D.,
Professor

GRE/le

Encl.

If you wish to receive a copy of the study results, please mail this card.

Name:

Address:

Mr. Glen Ellingson
c/o Dr. A. G. Konrad
Dept. of Educational Administration
University of Alberta
EDMONTON, Alberta
T6G 2G5

Athabasca University

January 10, 1985

Dear Student:

Athabasca University has agreed to participate, with the University of Alberta, in a study of the reasons why senior students return to post-secondary study.

To this end, as one of our students you are being requested to respond to the enclosed questionnare. The results from this accumulated data may allow us to serve our students better - thus, it would be appreciated if you would return your response as directed.

Thank you for your assistantce.

Sincerely,

Diana R. Pryde
Assistant Registrar

DRP/rg

Box 10,000 Athabasca, Alberta, Canada T0G 2R0
Telephone (403) 675-6111 Telex 037-2991

Appendix E

Education Participation Scale Factor Structure

Boshier and Collins (1982:171)

Table 2. Education Participation Scale factor structure after orthogonal rotation.

	Variable (abbreviated)	*Social contact*	*Social stimulation*	*Professional advancement*	*Community service*	*External expectations*	*Cognitive interest*
19.	Gain insight	−0·42 **	−0·34	0·08	−0·42	−0·13	−0·04
2.	Common interest	−0·46 **	−0·16	−0·17	−0·09	−0·21	0·03
33.	Social position	−0·51 **	−0·22	0·39	−0·16	−0·20	−0·13
9.	Accepted others	−0·52 **	−0·37	0·14	−0·17	−0·35	−0·09
17.	Part of a group	−0·71 **	−0·22	0·00	−0·19	−0·05	0·08
38.	New friends	−0·71 **	−0·21	0·02	−0·13	−0·12	−0·01
14.	Personal association	−0·71 **	−0·23	0·07	−0·19	−0·11	0·03
31.	Social relations	−0·74 **	−0·20	0·15	−0·21	−0·12	−0·03
26.	Congenial people	−0·76 **	−0·24	0·00	−0·13	−0·06	0·08
35.	Educ contrast	−0·13	−0·50 **	0·27	−0·18	−0·06	0·11
21.	Escape TV	−0·36	−0·54 **	−0·16	−0·11	−0·35	−0·14
24.	Few hours	−0·43	−0·54 **	−0·20	−0·03	−0·28	−0·08
27.	Life contrast	−0·45	−0·55 **	0·03	−0·04	0·05	0·10
16.	Narrow occupation	−0·13	−0·60 **	0·26	−0·16	−0·04	0·06
28.	Break routine	−0·43	−0·62 **	−0·17	0·05	−0·09	0·07
12.	Vegetable	−0·11	−0·63 **	0·03	−0·22	−0·20	0·17
8.	Frustration	−0·37	−0·66 **	−0·02	−0·07	−0·08	0·00
5.	Relief borodom	−0·35	−0·66 **	−0·09	0·05	−0·08	0·01
3.	Professional advancement	0·02	0·12	0·79 **	−0·11	0·03	−0·03
10.	Job status	−0·17	−0·05	0·76 **	−0·04	−0·17	−0·13
20.	Earn degree	0·01	−0·01	0·66 **	−0·13	0·01	−0·16
18.	Job competence	0·12	0·07	0·66 **	−0·25	−0·17	0·09
15.	Competition	−0·21	−0·15	0·57 **	−0·04	−0·39	0·06
13.	Other courses	−0·01	−0·06	0·53 **	−0·37	−0·02	0·11
32.	Formal requirements	0·08	0·04	0·46 **	−0·19	−0·44	−0·04
11.	Supplement	−0·00	−0·42	0·45 **	−0·22	−0·01	0·04
4.	Citizen	−0·31	−0·19	0·21	−0·54 **	−0·07	0·03
23.	Human relations	−0·32	−0·11	0·16	−0·66 **	−0·00	0·12
39.	Community	−0·27	−0·09	0·16	−0·70 **	−0·17	0·01
29.	Mankind	−0·07	−0·04	0·27	−0·73 **	−0·15	0·16
22.	Community service	−0·15	−0·10	0·18	−0·76 **	−0·21	−0·03
34.	Escape unhappiness	−0·38	−0·46	−0·08	−0·16	−0·47 **	−0·24
30.	Keep up	−0·27	−0·18	0·39	−0·09	−0·47 **	0·09
6.	Recommendation	−0·08	−0·06	0·24	−0·15	−0·68 **	−0·10
36.	Comply	−0·20	−0·15	0·04	−0·10	−0·74 **	−0·07
40.	Instruction	−0·20	−0·15	0·08	−0·14	−0·75 **	−0·14
25.	Joy of learning	−0·13	−0·11	−0·24	−0·01	0·01	0·81 **
37.	Sake of learning	−0·04	−0·14	−0·12	−0·03	−0·10	0·80 **
7.	Enquiring	0·03	−0·04	0·07	−0·15	0·20	0·73 **
1.	Seek knowledge	0·06	0·06	0·14	−0·05	0·22	0·73 **
	Cumulative proportion of variance accounted for	0·2325	0·1895	0·1788	0·1433	0·1376	0·1183
	Proportion of variance accounted for by each rotated factor	27·43	38·88	46·69	50·65	54·51	57·40